OL 71

NO 6

# textile

NOVEMBER - 15 - 1946

Our new and regular feature, "The Bulletin Board," begins with this issue. Names of the four persons who submitted this title and won who submitted this title and 2. \$25 each are listed on Page 12.

# bulletin



WHICH WILL BRING YOU MORE DOLLARS?



### A HIGHER PRICE FOR YOUR WASTE OR LESS WASTE OUTPUT?.....

Rayco engineers are prepared to give you a practical answer to this question by making a free in-the-mill waste survey and analysis which will help you accomplish the following:

- 1. Reduce unnecessary waste output.
- 2. Lower waste handling costs.
- 3. Improve pre-cleaning methods to increase quality and production.

At your request we shall be glad to arrange a complete waste survey for your mill.

### The RAILWAY SUPPLY & MFG. CO. and Affiliates

Specialists in Grading, Marketing and Processing Cotton and Synthetic Fibers
General Offices: CINCINNATI, OHIO

Plants and Sales Offices:

Cincinnati, Ohio
Franklin, Ohio
Atlanta Ga

Charlotte, N. C. Covington, Tenn. Greensbaro, N. C. New York, N. Y. Chicago, III. Detroit, Mich.

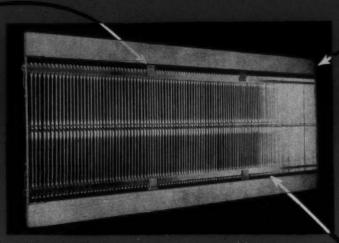
(ABC)

ADVERTISING



SYNTHETIC FIBERS







"Drawing-In" FLAT STEEL HEDDLES

HARNESS EQUIPMENT



Ste-Hed-Co



-It's New - it's Perfect - it's Positive - it's Simple and Speedy.

Frame and Heddle (an entire unit) specially designed and made with the same high efficiency and ideals as all Ste-Hed-Co Products.

Heddles can quickly be removed—no lock hook, center braces, or anything to obstruct a perfect movement of the Heddle from one side of frame to other.

Made for weaving every type of textile fabric, cotton, worsted, wool, rayon and other synthetic yarns.

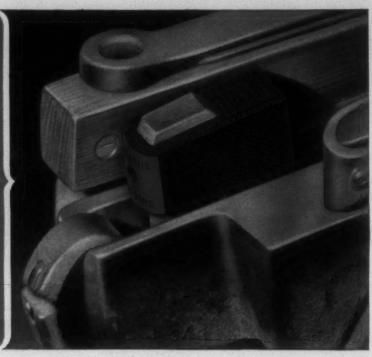
STEEL HEDDLE MFG.CO.

PLANTS OF REANCH OFFICES

Greenville, S. G. - Atlanta, Ga. - Greenabers, N. C. - Providence, R. J. - Montreal, Canad.

# Dayton Deluxe Loop Packers...

BUILT TOUGH to stand increasing shuttle speeds



As shuttle speeds go higher and higher the advantages of Dayton De Luxe Loop Pickers become greater and greater. They have approximately twice the life of ordinary pickers at today's higher speeds. Put another way, they are cutting picker costs as much as 50%.

Dayton De Luxe Loop Pickers are made of special fabrics and resilient rubber, molded together into a superstrong unit. They are designed with a flared bottom for easy application. Corners are rounded. The picker stick hole is molded for a perfect fit.

If you are not using Dayton Pickers order a few to use as replacements. They will sell themselves to you. Write for full information today.

THE DAYTON RUBBER MANUFACTURING COMPANY Factory: Waynesville, N. C.

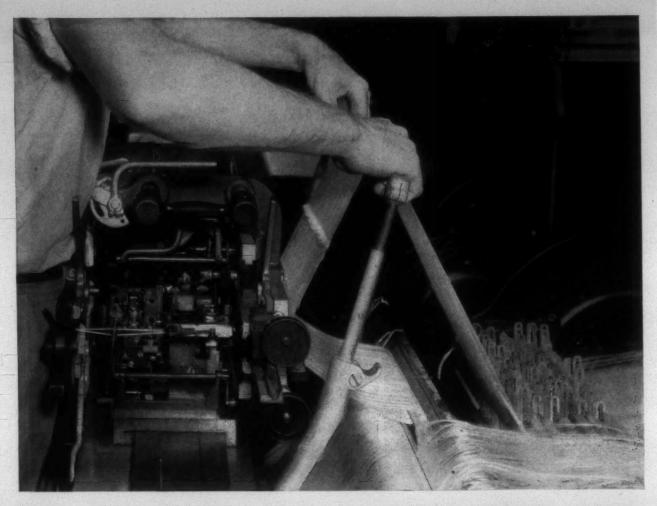
Main Sales Office: Woodside Bldg., Greenville, S. C.

# And Here are More Reasons why you should standardize on Dayton DeLuxe Loop Pickers

- 1. Cut picker costs up to 50%.
- 2. Greatly increase production.
- 3. Save operating time.
- 4. When boxed, loom stays in parallel.
- 5. Throwing a crooked shuttle is eliminated.
- 6. Jerked-in fillings reduced to minimum.
- 7. Give month-after-month service on high-speed looms.

Dayton Rubber

FAMOUS DANGE SYNTHETIC RUBBER PRODUCTS SINCE 1934



# THE "STANDARD" WAY OF REPLENISHING WARP IS WITH BARBER-COLMAN WARP TYING MACHINES



In the horse-and-buggy days, warp replenishment was a tedious task. At the best, you tied-in a new warp by hand . . . at the worst, you drew in a whole new warp, an eye-straining, hours-long job. But, for more than a generation now, a better way has been available . . . a way so good that it is practically "standard" in every up-to-date American mill. Barber-Colman Warp Tying Machines do a better job, more easily, and in a fraction of the time it used to take. The actual knot-tying is mechanical, uniform, accurate, and fully automatic. The operator simply sets up the old warp and new warp in the clamps, combing out the ends to keep them straight . . . then a rapid crank-turning and the work is done. An even row of knots, with ends clipped alike, joins the two warps. The American textile industry is world-famous for efficiency of operation and quality of product . . . and a noticeable contributing factor in this achievement is the dependable performance of cost-saving Barber-Colman Warp Tying Machines.

AUTOMATIC SPOOLERS . SUPER-SPEED WARPERS . WARP TYING MACHINES . DRAWING-IN MACHINES

### BARBER-COLMAN COMPANY

ROCKFORD . ILLINOIS . U.S.A

FRAMINGHAM, MASS., U. S. A.

GREENVILLE, S. C., U. S. A.

MANCHESTER, ENGLAND



FOR RICH, SMOOTH SOFTNESS



FOR PERMANENT UNIFORM FINISH

A HARTEX PRODUCT

ation-active Softener





**ECONOMICAL** 

PRINT COLORS

CATYLON is economical—only an exceedingly small quantity of this very efficient softening agent need be used.

CATYLON is permanent-repeated laundering or dry cleaning will not affect the original handle of the fabric or the rich, smooth softness of the finish.

CATYLON makes fabrics more "salable"—assures bright shades, clear print colors and uniform finish.

CATYLON is available in a complete range of Cation-Active chemical formulae to meet all your special fabric requirements. Let our demonstrator prove, in your plant, the benefits resulting from the use of CATYLON. Your inquiry entails no obligation.

HART PRODUCTS CORPORATION • 1440 Broadway, N.Y. 18, N.Y.

#### HARTEX PRODUCTS

Rayon Oils & Sizes Nylon Oils & Sizes Kier Bleaching Oils Finishing Oils

Synthetic Detergents **Conditioning Agents** 

Scrooping Agents Sanforizing Oils

Leveling Agents Cationic Softeners Cotton Warp Dressings Wetting-Out Agents Weighting Agents Mercerizing Penetrants

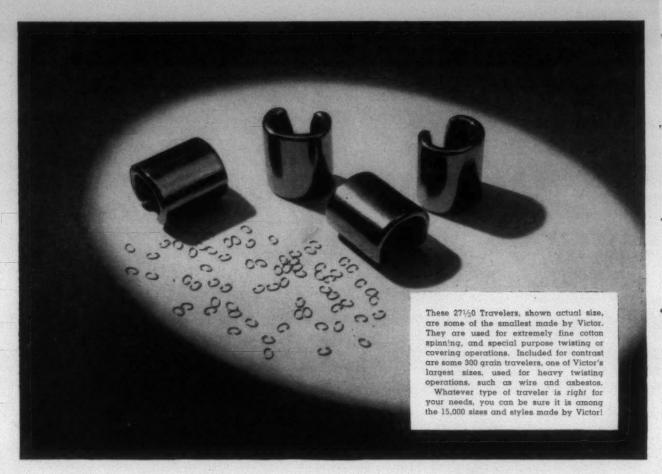
Splashproof Compounds

Delustrants

Send for free booklet, "Mercerizing and ALKAMERCE - The Ideal Dry Mercerizing Penetrant'



based on research



# HOW TO STOP TRAVELERS FROM

Growing

A TRAVELER is the smallest piece of equipment you use in fiber processing. But, if you choose the wrong traveler, you'll see it "grow", prodigiously, in its influence on yarn production, until it blocks your best efforts to meet delivery schedules and quality standards. A little traveler may become your biggest "headache".

With so many new synthetics and blends coming up for processing, it is more difficult today than ever to choose the *right* traveler. Experience with conventional fibers helps. But, to save precious time in setting up smooth-running spinning and twisting, you need up-to-the-minute information.

You can get that kind of information from a man whose job it is to keep abreast of every new development. The Victor Service Engineer is fully prepared to help you keep out of traveler trouble, and more than that, help you raise production and quality, often well above what you expected.

Make sure you are getting the most and the best from your frames, whether you are running blends, straight synthetics, or conventional fibers. Write, wire, or phone, and a Victor Service Engineer will call promptly.

# VICTOR I Ring O Travelers

#### VICTOR RING TRAVELER COMPANY

PROVIDENCE, R. I. .... 20 Mathewson St. . . . Tel. Dexter 0737

GASTONIA, N. C. . . . . . 173 W. Franklin Ave. . . . . Tel. 247



### Systematic Lubrication Reduces Costs

An Adequate Oiling Plan

Prevents undue wear of parts Reduces Cost of Repairs Increases life of looms

You can prevent undue wear of loom parts by installing and carrying out a well-planned schedule of lubrication and cleaning. It will reduce to a

minimum expensive overhauling and the consequent shutting down of your looms with the loss of their production.

### Lost Production Like Lost Time Can Never Be Regained

Make sure your looms are properly lubricated by giving to one man, who is thoroughly familiar with the loom and its operation, full charge of and responsibility for your oiling program.

Rigid performance tests will indicate the best oil and grease for your conditions. Draper Oiling Charts give you a well arranged plan to follow. See that each oiler has one and uses it.

The foundation of a good oiling system is to see that a thorough job of oiling and cleaning is done when the warp is changed.

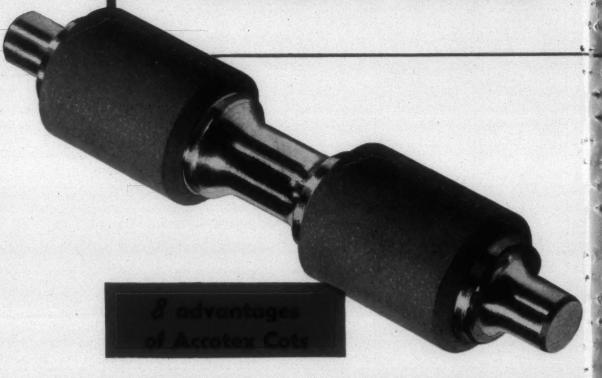
We are working with the American Society of Mechanical Engineers and leading oil companies to bring you new diagrammatic oiling charts in color. These charts are now being tested under actual mill conditions. You will find them helpful. They will help you reduce losses from human error.

An Adequate Oiling Plan will increase the efficiency of your looms and reduce maintenance costs.

Fourth in a Series

Of What Well-Managed Mills Are Doing to Get the Best Results in Weaving DRAPER CORPORATION
HOPEDALE MASSACHUSETTS

# REDUCES LAPPING



- 1. LONG SERVICE—Accotex Cots are tough.
  And they can be rebuffed 5 or 6 times.
- 2. GOOD DRAFTING—Accotex Cots retain their excellent grip, because their corkand-rubber composition resists slicking.
- 3. REDUCED EYEBROWING—The resistance to slicking minimizes eyebrowing.
- 4. REDUCED LAPPING—Accotex Cots have little affinity for textile fibers and are non-sweating even in humid weather.
- 5. GOOD START-UP—Accotex Cots are non-thermoplastic and resist flattening.
- 6. SOLVENT RESISTANCE Accotex Cots are not affected by oil, water, dyes, or commonly used textile solvents.
- 7. SEAMLESS CONSTRUCTION Accordex Cots have no seams, no structural weaknesses to cause failure in service.
- 8. QUICK ASSEMBLY—Accotex Cots are ready glued for easier, quicker assembly.

CORK COTS
ACCOTEX APRONS

# Accotex Roll Coverings won't attract fibers . . . won't sweat

Y OU GET greater freedom from top roll lapping with Armstrong's Accotex Cots. That's because Accotex is made of a specially developed cork-and-synthetic-rubber composition. This material does not attract textile fibers. It is not affected by temperature and humidity changes, and it does not sweat.

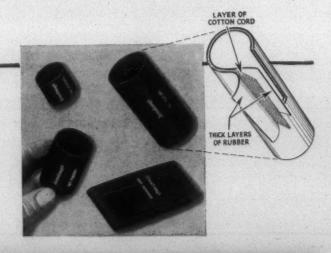
This combination of cork and synthetic also provides other important spinning advantages. Tough synthetic rubber makes Accotex Cots last longer. High-friction cork provides consistently better drafting for consistently high yarn strength. Cork

also helps prevent slicking and reduces eyebrowing. What's more, Accotex Cots can be rebuffed five or six times.

These advantages, together with those at left, explain why more and more mills are switching to Armstrong's Accotex Cots... why they are serving more spindles than any other synthetic cot. Your Armstrong representative will gladly help you arrange test installations on your own frames. Ask for samples, prices, and complete information. Or write today to Armstrong Cork Co., Textile Products Dept., 8211 Arch Street, Lancaster, Pa.

## Also by the makers of Accotex Cots . . . the Accotex Apron

The exclusive Armstrong construction shown at right is the reason the Accotex Long Draft Apron gives you more production, cleaner-running work, reduced lapping, and better grip. This seamless apron is made of heavy layers of non-oxidizing synthetic rubber which enclose a sturdy, non-stretch cord interliner. This special construction is the result of the same specialized research and technical skill that produced the Accotex Cot.



WHETHER YOU HANDLE...

Bleach it with
BECCO
HYDROGEN
PEROXIDE

COODS

RAYON

Why not take advantage of Becco's many years of specialized bleaching experience? Ask our engineers and chemists to advise you what method of bleaching is most suitable for processing your goods, regardless of the type of fibre used.

This expert bleaching "know-how" can be yours, free. Write to:



## **BECCO SALES CORPORATION**

AGENTS FOR BUFFALO ELECTRO-CHEMICAL CO., INC.

12 Sawyer Avenue, Buffalo 7, N. Y.

New York

Boston

Philadelphia

Chicago

Charlotte

# THE FLEXIBLE WINDING MACHINE that gives your customers the one best angle of wind

A major advantage of the exclusive Rotary Traverse, the Roto-Coner's\* one-piece driving drum and traverse guide, is the opportunity to wind all counts of yarn without having to change winding speed. There are no cams, so there is no need to sacrifice production when winding the coarser counts.

This also gives an advantage to the knitter because all packages wound on the Roto-Coner\* have the same minimum number of winds desirable for troublefree delivery.

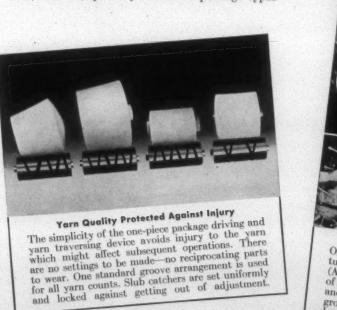
The flexibility of the Roto-Coner\* also includes its suitability for a wide range of yarns—cotton, wool, worsted, spun rayon—and of package types—

paper cones and tubes, wood cones for warping, wood tubes for twisting, and dye packages.

A new set of traverses is easily installed—there is no grease to make the job messy.

For complete information about the versatility of the Roto-Coner\*, request Bulletin 144 (knitting) or 244 (warping).

Address Universal Winding Company at Providence, Boston, Utica, Charlotte, Atlanta, Chicago, Los Angeles, Montreal or Hamilton.







WARPING CONES . DYEING PACKAGES . PARALLEL TUBES FOR TWISTING



Questions, answers and other material submitted by the readers for use in this column should be addressed to Field Editor, Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C. Material need not be in any particular form, since it will be properly edited before publication.

would be to have it take up both sides of a page, completing the page whenever necessary with notes on processes, etc., when the number of questions and answers were insufficient. With this arrangement the reader could remove the page for filing and eventually accumulate a valuable record for reference. It may also be that you could provide an index once each year covering the various questions and answers, etc., which would add materially to the value of the collection. . . . .

F. L. YOUNG, Textile Consultant. Hickory, N. C.

¶ A very good suggestion. Would any other readers be interested in such a record?

It is a pleasure to send in suggestions for the heading of your new page in TEXTILIE BULLETIN. You will find an article, "The Textile Graduate," which expresses my sentiments as well as others. Please delete my name because it might jeopardize my position. . . . .

CONTRIBUTOR NUMBER 2.

¶ Thanks for the article. You will find it on Page 25 of this issue.

.... We are interested in securing a buyer's guide to handkerchief manufacturers—particularly men's. . . . .

McGaugh Hosiery Mills.

Dallas, Tex.

¶ Anybody know of one?

Will you please send me one of your latest directories? No traveling mill salesman has any business on the road without one. . . . .

CONTRIBUTOR NUMBER 4.

Under separate package we are returning the textile directory sent us this week. The pages are not in correct order. This will make the book of impractical use to us. . . . Industrial Engineering Co.

Kershaw, S. C.

... In looking over this [Clark's] Directory [of Southern Textile Mills] we find that Pages 129-160, inclusive, have been repeated, and apparently Pages 161-192, inclusive, have been omitted from this particular book. . . . .

Southern Airways.

Atlanta, Ga.

¶ Due to a slip-up in the binding department, some copies of the latest edition of the directory are incomplete. If you have one of these copies, notify us and we'll send you a complete one.

I want you to please advise me why my copy of the BULLETIN is so long reaching me? My copy of the 15th just arrived today, which is the 30th. . . . I like to get my paper as soon as possible after it comes off the press. . . . .

CONTRIBUTOR NUMBER 7.

Like everyone else today we have our production problems and have been running behind schedule on recent issues of TEXTILE BULLETIN.

I am writing to inquire if it will be possible to obtain reprints of an article that appeared in the Oct. 1, 1945, issue of TEXTILE BULLETIN. The article is entitled "Atmospheric Conditions in Cotton Textile Plants—A Study for the Division of Labor Standards, U. S. Department of Labor" by Dr. Philip Drinker. . . . .

CONTRIBUTOR NUMBER 8.

. . . Would be interested to know what weighed 70,250 pounds. There is no such proportion of rubber to cotton in conveyor belts!

B. L. WHITTIER, Mt. Vernon-Woodberry Mills.

¶ Mr. Whittier refers to a release in the Sept. 1 issue relative to "largest single conveyor belt ever made," weighing 72,000 pounds and containing "1,750 pounds of cotton." The matter was subsequently cleared up by the following letter:

. . . . A cipher was left off in the process of making the stencil for the release, and we didn't catch the omission. It should have been 17,500 pounds.

Public Relations Department. Akron, Ohio

. . . . Last year I had the pleasure of corresponding with you relative to the intensive technological volume I am writing. . . . My chapter on yarn is a very thorough survey of all phases of this subject. . . . To augment my explanation of how to find the

# Contest Winners

The editors take this opportunity to thank the many readers who sent in entries in the contest to provide a title for this new editorial feature. Out of the hundreds of really good suggestions which poured in it was difficult to select *the* outstanding one. The contest board, after much deliberation, and to the consternation of the finance department, finally came up with not one, but

four winners of the \$25 prize. Congratulations to the following men who submitted the prize-winning title which is displayed above:

Baltimore, Md.

L. B. Covington, Jr., Mollohon Plant, Kendall Mills, Newberry, S. C.

J. E. B. Shi, American Thread Co., Tallapoosa, Ga.

H. E. Anderson, Graton & Knight Co., Worcester 4, Mass.

William A. Newell, Editor, Textile Forum, North Carolina State College, Raleigh.



his new chrome color is especially recommended for use on worsted and woolen materials where good resistance to light, washing and dry cleaning is important... high-grade men's suitings, overcoatings, upholstery, etc. It is also an excellent color for dyeing tops and rawstock to be incorporated in blends.

"PONTACHROME" Gray GL is level dyeing, penetrates well, is readily soluble. Chromate method of application is preferred.

Our sales representative will be glad to give you additional information about this outstanding chrome color. E. I. du Pont de Nemours & Co. (Inc.), Dyestuffs Div., Wilmington 98, Del.

\*Reg. U. S.IPat. Off.

Du Pont Dyestuffs



BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

diameter of yarns, I would like to add extracts from the article by Thomas Nelson, which you published in your June 1, 1944, edition.....

FRANCES IMANDT.

Mt. Vernon, N. Y.

Changes in textile mill ownership in North and South Carolina have occurred so frequently during the past few months that I have lost track to a considerable extent as to just what did happen. It occurs to me that it might be a good idea if you would run a summary some place in your good publication relative to all of these changes. On the other hand, maybe you have a list made up, and if so, I would surely like to have a copy.

CONTRIBUTOR NUMBER 12.

Thanges have occurred so rapidly it will be almost impossible to make an accurate recap until the dust settles. We do have a list which is fairly well up to date and from which we'll be glad to furnish details upon request.

We understand from various newspaper clippings brought to our attention recently, that a good deal of effort is being made to further cotton manufacturing industries in the South. We have been endeavoring for several months to open a small handkerchief manufacturing establishment, but are completely handicapped by our inability to obtain cotton cloth.

It is interesting to note that although almost all of this cloth is being manufactured right here in North and South Carolina, it is impossible for a Southerner to do business direct with the South's cotton mills. All of the output of the mills is being sold through New York representatives, and we are able to buy this product of the South here in the South, without going to New York to do so. In view of these facts, it is not surprising that the South is far behind the North in manufacturing and so forth.

Since the type of cloth that we are en-

deavoring to buy is very scarce, we have been unable to get on the "inside" in New York City to purchase cloth. All of the output is going to the most favored Northern factories. Can you offer us any information or advise where we may be able to buy long cloth or a cheap grade of sheeting that could be used in the manufacture of competitively priced pocket handkerchiefs?

GEO. S. BAKER, JR.,

Baker Specialty Co.

Durham, N. C.

¶ Through the years, Mr. Baker, the textile industry has preferred to merchandise its production through the various selling houses located in downtown Manhattan. You will have to take it from there.

We have heard nothing from you concerning the arrangements for a narrow fabric section in TEXTILE BULLETIN. We would be very interested to know what you have found out and how you are progressing with the idea

CONTRIBUTOR NUMBER 14.

We must admit to being somewhat at a loss in the field of narrow fabric manufacture. Perhaps some of our readers can offer suggestions as to the desirability of such a section, sources for articles and technical information, etc.

On Page 20 of TEXTILE BULLETIN for Aug. 1, 1946, is a cut of a man working at a loom. For sometime past we have been seeking such a cut to use with our weekly column "On the Job," published in our house organ, *The Textorian*. . . . .

TRAINING SUPERVISOR, Revolution Cotton Mills.

Greensboro, N. C.

The engraving was sent forthwith (see below).

Thank you very much for the cut. . . . . Most everybody here takes the TEXTILE BULLETIN and those who don't take it borrow from the rest of us and we are agreed that

you are real authorities in the field of textile

TRAINING SUPERVISOR, Revolution Cotton Mills.

¶ From Textile Bulletin a deep bow of appreciation. We are glad to offer assistance to those in charge of textile plant or village periodicals.

... We desire to contact mills from whom we would like to buy closely woven fabrics for use in covering feather filled comforters and pillows.

Sanitary Feather Works.

Fort Worth, Tex.

¶ Any manufacturers interested?

On behalf of Walter Regnery, our company and myself, we wish to express our sincere appreciation for the splendid recognition given us in your issue of Oct. 15, 1946. . . . Willis Irvin, architect for our new houses, was especially pleased with the recognition you gave his efforts.

WM. A. MOORHEAD, Vice-President, Joanna Textile Mills Co.

Goldville, S C.

I want to thank you for the section of the article on Joanna Mills devoted to our product which appeared in your Oct. 15 issue. We are rather proud of the Humiduct system in that mill.

A. H. BAHNSON, JR., Vice-President, The Bahnson Co.

Winston-Salem, N. C.

¶ We were rather proud ourselves to be the first textile journal to publish the full story on Joanna's activities. We continue to be anxious to record outstanding accomplishments of various Southern textile plants.

With the demise of price controls on all textile products, and a buyers' market said to be just around the corner, manufacturers find themselves in the unique position of baving to learn merchandising techniques all over again.

### COMPARE

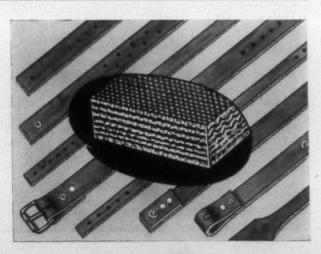
Does your present strapping have ALL of these features?

- V LACK OF STRETCH
- ✓ UNIFORMITY OF STRENGTH
- V UNIFORMITY OF THICKNESS
- V RESISTANCE TO OIL AND HEAT
- V FLEXIBILITY
- V LONG LIFE
- V "NEOPRENE" TOUGHNESS

### DODENHOFF FABRIC STRAPPING

Has been scientifically designed to meet all of these requirements of low cost production efficiency

A completely new, improved fabric strapping developed by the pioneer in the field. Immediate deliveries in any size, shape or thickness.





# BORDERLINE VISION\*

May Be Slowing Your Workers



down your workers.



better work.

### You Can Speed Up Production With Wheeler Skilled Lighting!

Lighting that's just a shade too dark or too glaring is hard to spot at a

Borderline Vision in many a plant means little, individual production slowdowns. Little slowdowns because a careful worker has to look twice to do the job right - because a careless worker may look once and do it

wrong. Little slowdowns that add up to an expensive lag in your production. That's why better, faster work is almost automatic when you put in Wheeler Skilled Lighting. For 64 years Wheeler has specialized in light engineering. Wheeler units are designed to control light - to get maximum illumination from standard lamps. Their high reflection factor puts light to work where it belongs: on the job. And their rugged, porcelain enamelcoated construction means longer service and easier maintenance.

That's why it will profit you to write today for catalogs giving full details on the complete line of Wheeler Fluorescent and Incandescent Reflectors. Wheeler Reflector Co., 275 Congress St., Boston 10, Mass. Representatives in New York and principal cities.



#### All-Steel Open-End Fluorescent Unit

Available for two or three 40-watt, or two 100-watt lamps. Broad wiring channel with accessible, enclosed ballast. Mounts from chain or conduit, individually or in

**RLM Solid Neck Incandescent Reflector** 

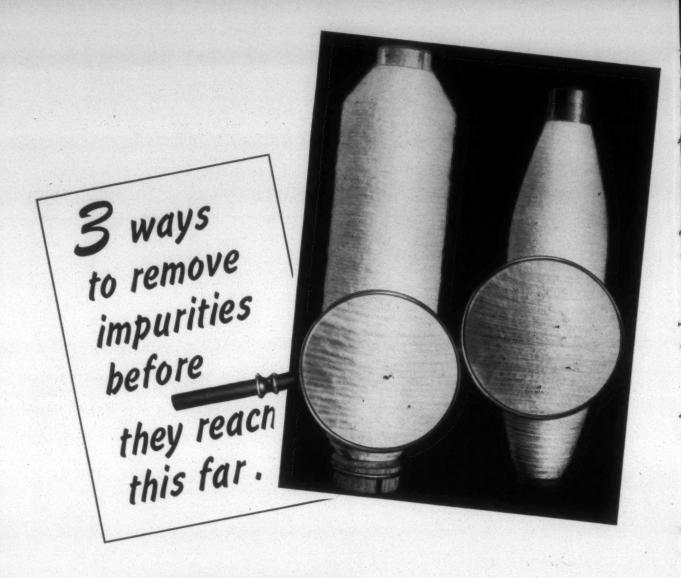


Maximum lighting efficiency for either indoor or outdoor use. Expertly designed, ruggedly built. 75 to 1500

Distributed Exclusively Through Electrical Wholesalers

# Wheeler Reflectors

PECIALISTS IN LIGHTING EQUIPMENT SINCE 1881



- #11 DUST AND WASTE EXTRACTOR
- 2 CONTINUOUS STRIPPER
- 3 WASTE CONTROL SCREEN

The complete elimination of every single impurity in a finished yarn package is an achievement to be desired. But many of the impurities which do get through can be eliminated if proper steps are taken at certain strategic points.

The Saco-Lowell #11 Dust and Waste Extractor is the first point of attack against these minute particles. Here the great bulk of fine peppery leaf and dirt is removed. The next point of attack is at the card. Here, by using a "combat team" composed of the Continuous Stripper and the Waste Control Screen, it is possible to keep the cylinder wire in such an active condition that there is a definite reduction in the amount of nep, leaf and other impurities in the web.

As a means of estimating the amount of impurities that are now "getting by" we suggest you make a nep and leaf count on ten square inches of cloth. Should you find this count too high our engineers may be able to make some helpful recommendations.

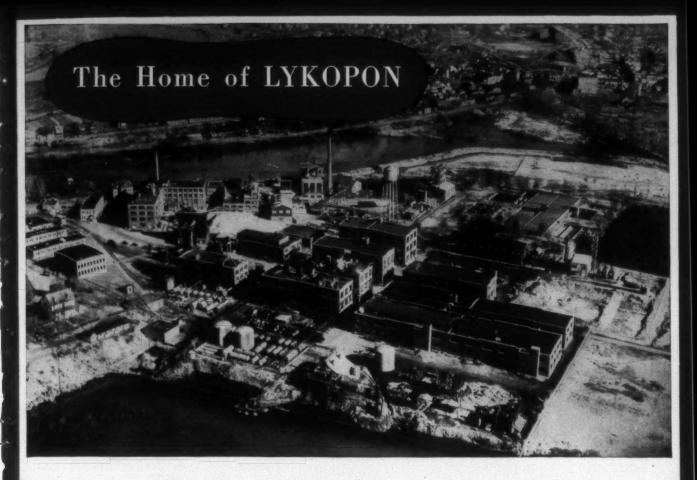
Saco-Lowell Shops

BOSTON, MASSACHUSETTS

Charlotte

Greenville

Atlanta



### ... and other reliable textile chemicals

# THE SERVICE THAT BUILT OUR BUSINESS CAN HELP YOURS

Our business has been built largely on the practical help we have been able to give our customers, right in their own plants, in adapting in their own plants to their Rohm & Haas products to their

Our representatives are men with technical training and practical experience in the use of industrial chemicals. Call in a member of our textile chemicals department when you need assistance in choosing or using . . .

Chemicals For Fine Textiles This is the Bristol, Pa. plant of the Rohm & Haas Company, where many of the long line of dependable textile chemicals are produced.

The first Sodium Hydrosulfite—and still the foremost.

FORMOPON... Sodium Sulfoxylate Formaldehyde — the industry's standard for purity and performance.

PROTOLIN ...
PROTOLIN W...
FORMOPON EXTRA...

Zinc Hydrosulfite and Zinc Sulfoxylates —
dependable reducing agents for stripping
every fiber.

RHOZYME DX ... Textile enzymes — stable powders for the uniform desizing of all fabrics.

Acrylic Resins in a complete range of modern finishes for quality textiles.

Lykopon, Formopon, Protolin, Rhozyme & Rhoplex are trade-marks, Reg. U.S. Pat. Off.

Represented in Canada by Rohm & Haas Company of Canada, Ltd., Toronto; and in South America by Cia. Rohm y Haas, S. R. L., Carios Pellegrini 331. Buenos Aires, Argentina, and agents in principal South American cities.

### ROHM & HAAS COMPANY

WASHINGTON SQUARE, PHILADELPHIA 5, PA.

Manufacturers of Chemicals for the Textile, Leather and other Industries . . . Plastics . . . Synthetic Insecticides . . . Fungicides . . . Enzymes





### ... and it still is — with one revision!

When the page above was published, C&K advocated... and still does... this first line of self-defense against the future, for every weaving mill: A systematic and tangible replacement fund, definitely earmarked and set aside for the purchase of new looms. And back in 1940, a yearly replacement of 10% of a mill's looms was recommended.

But that was before the war... before looms were subjected to 4 years of accelerated depreciation under all-out operating conditions.

So today that figure of 10% will stand careful re-examination, in the clear light of this fact:

The total depreciation, as of today, can be accurately figured only by combining that accelerated wartime depreciation with the depreciation prevailing since then. Therefore, today, the yearly loom-replacement figure is higher than previously recommended, depending on the mill, the age and state of its looms.

Your funds, accumulated against this higher depreciation, will stand up and bridge the fiscal gap between present equipment and new C&K Looms. And then—your new C&K Looms will repay your investment by higher operating speeds and finer fabrics.

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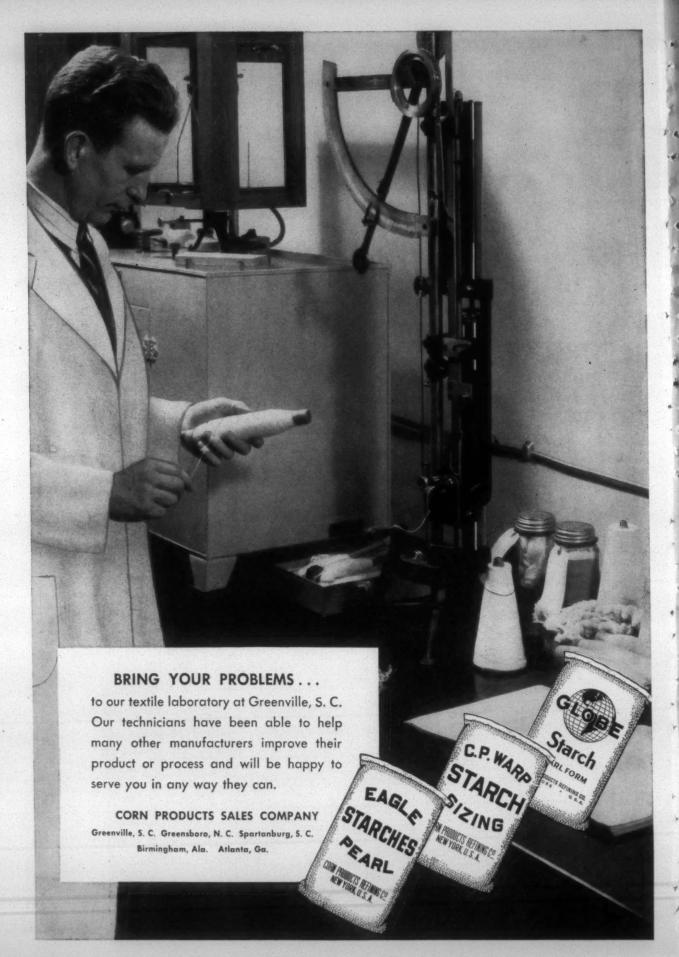
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With the H & B Casablancas High-Draft Spinning System the same one-piece cradle is used for ALL counts of yarn, and the tensor is changed only in very special cases. Ordinarily the same tensor will handle yarns ranging from 16 to 60 because, while the fibres in the 16 yarn are in greater mass, they are shorter and the band retention is about the same as with the 60 yarn where there is less mass but longer fibres.

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The "Quick-Change Cradle" is only one of several unique economy and quality features of the H & B Casablancas High-Draft Spinning System. Other features are as follows: —

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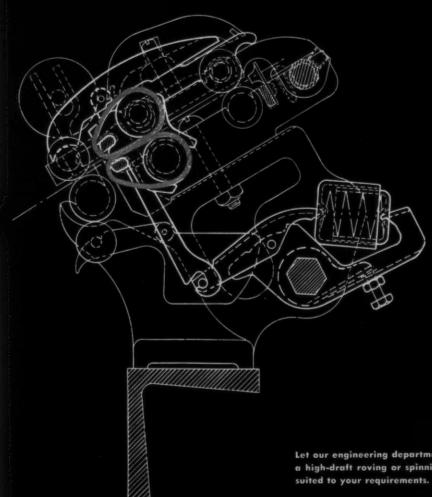
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# SINCLAIR TEXTILE LUBRICANTS

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# textile bulletin



Vol. 71

November 15, 1946

No. 6

# THE TEXTILE GRADUATE

- An Anonymous Article -

THERE are several current movements in the industry to improve the facilities of our textile schools. Research in all departments is being worked out to a fine point. We read in our trade magazines about all the improvements that are taking place, but it seems to me that there are several important things missing in our present-day textile school curricula.

I was born and raised in a textile community, and I feel that I have a fair knowledge of all departments, as well as a knowledge of the average textile worker. There are some phases lacking in the program of advancement which is wished upon the average textile graduate.

In our school we learn the fundamental principles concerning the actual production and maintenance phases of manufacturing, but we don't learn too much about how to get along with the average textile employee. Since my graduation in 1937 I have found that this is a predominating factor and that I am supposed to be equipped to handle such problems when they arise. I find myself lacking in many respects, and it has been my privilege to hear other graduates from North and South Carolina express their opinions along this line, both pro and con.

Often it has preyed on my mind that perhaps our schools are neglecting the most important factors that a graduate should master. I grant that courses in sociology, psycholog etc., have a tendency to make a student more broad-minded, but it seems to me that they miss the important thing concerning the field that we enter. Why not textbooks on textile community, textile life, textile personnel or textile management? I think a definite program between graduate and employer should be emphasized to open the eyes of both parties.

There have been numerous textile graduates who never lived in or near a mill community. Upon graduation they become so dissatisfied with their prospects that they finally go into some other field. All graduates cannot pick the ideal town and they have to take what they can get. Some places are so discouraging that they eventually break down an experienced man, to say nothing of a man just graduated.

Two very disheartening things have happened to me since I became interested in the textile industry. One occurred during my senior year in high school. I could not choose between a textile or a musical education. My father was an overseer, so I asked him to speak to the superintendent and the manager of his mill, both of whom were textile graduates. This is what the mill manager said: "Do not send your boy to the textile school, for there is no future in it." Today he is one of the leading textile men in western North

Carolina. How he became so successful is beyond me. A man who has no love for or faith in his profession usually is a failure. I since have forgiven him for offering such advice, and I am glad that he is a successful man. During his career this man could have encouraged many boys to study textiles, and we would have had a better industry.

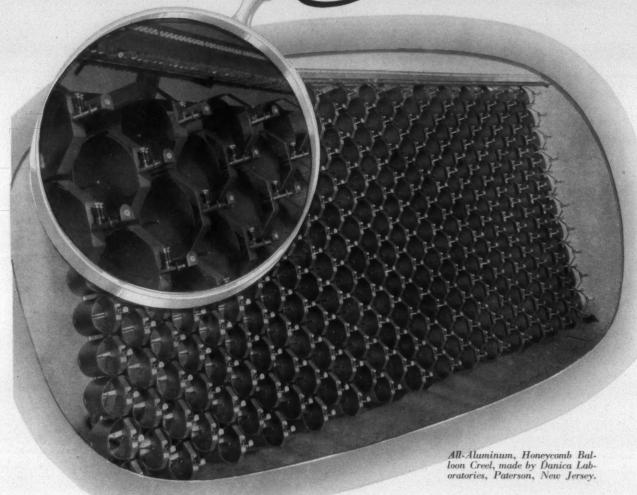
The other incident developed about two years ago during a conversation I had with a textile friend in another community. His boy was graduated from high school, and you naturally would expect the father, who was a top man in his company and a civic leader, to send the young man to a textile school. When I inquired where he was sending the boy for an education, he replied that a textile school would be the last place he would have his son matriculate. I at once became interested and wondered about this. It seems that the future was too shaky and that a textile graduate's career was a hit-and-miss proposition. It made my heart ache to know that an executive of a great company had lost faith in the future of the textile industry.

There are quite a few textile graduates who desired to get ahead but really didn't know how. There is no use beating around the bush by using the word "diplomacy" for "politics," which is essential in getting ahead. You must not only be a smart man to get ahead, but you have got to know how. No one at college versed me in such questions as: "Does my boss like me?"; "Do I like my boss and would he promote me if an opportunity presented itself?"; "Am I capable of assuming a responsible position?" Last but not least, "Who will make the best superintendent, a spinner or weaver?"

Then there is the understanding between employer and employee about pay. Should you ask for a raise? Should you ask for a promotion, or should you work hard and leave your fate entirely to someone else? All of these questions should be clarified. It is my opinion that since textile schools and manufacturers are really trying to work together, these problems concerning employee and employer relationship could we worked out easily. I know that apprenticeship is important and that experience is the best teacher. Why can't a man with ability go on in his specialty? For instance, a friend of mine majored in weaving and designing, but also had a good knowledge of operations in every mill department. He landed a job as weaving overseer, but seemed to be stuck there while yarn men all around him were promoted. Finally, he had to leave the company to get a break, and later became an excellent superintendent. Perhaps our future manufacturers should be given a technical education, or is it pull and politics that they need to study at college?

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ALCOA FIRST IN ALUMINUM



# Swiss Automatic Winders and Looms

By D. R. H. WILLIAMS, F.T.I., in The Textile Manufacturer

I HAD read and heard a good deal about what the Swiss engineers were doing in developing automatic pirn winders and looms and I had already tried the second model Scharer automatic pirn winder. I had also had described to me a most interesting and novel loom that Sulzer, the famous firm at Winterthur, was evolving. I was anxious to see these developments for myself, so I decided to make a trip to Switzerland, taking our weaving manager with me.

Mr. Scharer, who as a young man had worked as a mechanic in America, England and elsewhere, and who obviously knew his job from A to Z, was kind enough to take us around his works at Erlenbach. I had already bought his Model 3 pirn winder and expected to see a high standard of workmanship and organization. My expectations were more than fulfilled. Everywhere was the latest machinery for precision work. We particularly noticed the revolving jig, designed by themselves, in which the gear boxes are placed for final boring with the utmost accuracy. By the side of the jig was a two-tier revolving circular stand on which were hung all the drills that were required. The operator merely had to stretch out his hand for any drill he wanted, and it was not a second's job to replace the one he was using and take out another.

We watched all the little parts being made, tested for accuracy and placed on specially made stands, or trays; singly, not just thrown on anyhow, and wheeled away on little trucks with rubber-tired wheels to wherever they were wanted. We saw the gear boxes being fitted and then attached to the frames, where all the parts are assembled in order of requirement. I was more impressed than ever with the machine and its perfect workmanship. I knew of the precision methods adopted by Swiss watch and instrument makers; now I saw these methods applied to automatic winders. The machine is practically foolproof and, with ordinary care, should give a fine performance with very little supervision.

We went through the storeroom, kept in scrupulous order and, as I walked between the rows of boxes, I picked out a part here and there, a wheel or a spindle, an eccentric or a bearing, and found everything of perfect finish and fit. It was an engineering works that anyone might be proud of, and a real delight to visit.

#### The Sulzer Loom

After lunch in a charming room overlooking the Zurich lake, dotted with birds and the shimmer of sunlight, we got on a train to Winterthur to see, with a certain amount of excitement, the Sulzer loom, made on an entirely new principle but in the latest Swiss fashion, i.e., low on the ground, no top-rails or harness, just a slaie moving rapidly backwards and forwards at 240 picks per minute with the gleam of the shuttle race as it disappeared from the one-inch shed as the four-inch slaie beat up.

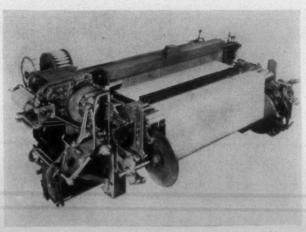
The "shuttle" is made of steel and is about 21/2 inches

long, one-half inch wide, and one-eighth inch thick with a gripper at one end to seize the weft, fed from a cone, and dart with it at 60 miles an hour through a triangular shaped race, made of steel triangles spaced at one-eighth inch gaps, set at an angle to the slaie so that, as the slaie goes back, the race rises for the shuttle to fly through the tiny shed, and then disappears. The shuttles are returned in an endless, but regular stream and the loom goes on smoothly, efficiently and very rapidly.

We saw looms weaving two pieces 48 inches side by side of plain-weave cotton bandaging for the Red Cross and a tightly made cotton twill about 130 inches wide. We also saw it weaving woolen and worsted cloths. The shafts are worked from underneath and we saw both four and eightshaft jobs. There is room to fix up to 24 shafts. The looms were working on the tappet principle; but the firm is experimenting with a jacquard dobby, though they have still to settle the most suitable place for mounting it. They have a good arrangement, on the jacquard principle, for working the shuttles, in any order with any number of colors (up to 20 or more); but they have not yet fixed on its final position. Using ten colors would mean a reduction of about ten per cent in the loom speed. There is a good warp let-off motion which allows the warp to come off at any desired tension.

The loom is extremely interesting, and is a fine example of precision engineering. The list is not suitable, in its present stage, for fine worsteds. The ingenious doubling-in of the cut-off end makes a thick list which would prevent a clean cut in finishing and the alternative method of using binding threads gives a rough edge which would not do for the fine specialty trade. The firm is continuing experiments to see if they can make it perfect for every requirement and do not anticipate putting it on the market before 1948, as they have no intention of offering it for sale until it is fool-proof.

The next day we went to Arbon through some of the loveliest country imaginable. Perfect order and tidiness



Back view of the Sulzer automatic loom.

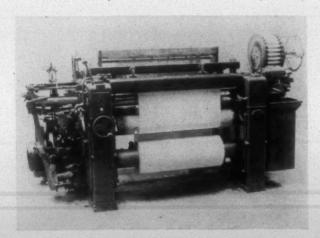
everywhere, even in the woods. Such order and such cleanliness in town and country, and such good taste, are bound to have a helpful psychological effect upon the workpeople in the factories, and lead to better workmanship and more exact results. The influence was apparent in the Scharer works and was equally apparent in the works of Saurer, the maker of the famous motor-lorries that bear their name. For some years past this firm has been developing a modern loom made on the lines of a first-class motor car, and has produced a loom it can well be proud of. It is low in height, about 30 inches to the top of the breast beam; and the heald shafts are actuated from below and are easily changed. The loom will take up to 22 shafts.

Dobby and box motions, actuated on the jacquard principle, are practically on the ground but are easily accessible. The going part is gear-driven at both sides with a smooth and easy movement; there is no wrenching up and down of the shafts. The loom runs as I have always felt a loom should run. In fact, when I had watched it for a short time, I felt as if one of my dreams had at last come true! Here was the latest in engineering skill applied to one of our most important yet almost, from an engineering research point of view, most neglected machines, with precision and more precision as its ideal.

The gears are all cut and are perfectly turned out. There are ball and roller bearings throughout. There are efficient and clean oiling systems to all the parts that need oiling, spreading out from boxes which were both visible and accessible; no need for a weaver to splash oil about all over the place, as so often happens! The dobby and the box motion, the driving and the picking motion are all built up in separate units, in the same way as the gear box and back axle of a car are built up. As we walked through the huge assembling shop, which has lorry assembly lines on one side and loom lines on the other, we could try these units for ourselves; and were delighted with the perfect ease and smoothness with which they worked.

We then went through the storeroom, past rows and rows of neat boxes in which the parts were carefully stored. We stopped to pick up a part here and there and were full of praise for their finish, fit and perfection. We went on to the testing department where every single part, down to the weft fork, is put to micrometer and other tests, and rigorously rejected if not up to standard in every respect.

Having made a round of the huge shops, fitted with all the latest machinery, the best that is made in any country,



The Saurer narrow-width automatic loom.

we returned to the loom and studied it still further. We noticed the easy starting and reversing motions, like the gear-box of a car; the way in which the loom stopped smoothly, but immediately the weft broke, with the shed open; or when a warp end broke, with the shed closed. In most cases a warp end could be taken up from the front, as the loom is so low that a weaver can easily bend over the shafts and tie a knot. There are no gears for changing picks, just a simple contrivance worked on the eccentric principle, with a numbered and legible scale to work to. The picking arm is so steady and so accurate, moving in a dead straight line, that though the loom had been running for months, the hole in the picker exactly fitted the shuttle end.

Other features we noticed, apart from the perfect workmanship and finish throughout, were the two weft forks; the efficient warp tensioning device, with a numbered scale, attached to the negative let-off motion; the variable positive take-up motion; the mechanical warp stop-motion, fitted in preference to an electric one; the simple method of raising the boxes for inspection by means of a pedalled lever, and the pressure-swells on the boxes, which make for easy release. One of the looms we inspected was running pick-andpick at 130 picks per minute on an all-worsted cloth, using four boxes on each side. Another running at the same speed was an automatic, with circular magazine, weaving a heavy woolen cloth, with a smoothness that was a joy to look at. We balanced a pencil on its end on the loom and it remained unmoved. The pirns were 81/2 inches long and  $1\frac{3}{16}$  inches in diameter.

Saurer has sold these looms in various countries to satisfied customers. In Switzerland, individual weavers are looking after 12 automatics and from two to four non-automatics (pick-and-pick), according to the type of work. The loom is a revelation in modern precision engineering. The automatic can be changed over to non-automatic, or vice versa. Additional parts are supplied for this purpose. The time required to effect the change is approximately a day.

#### Ruti Loom and Brugger Pirn Winder

On our last day we went out to the Ruti work to see the automatic and pick-and-pick looms, made very much on the lines of English looms and running at from 100 to 110 picks per minute. This loom, too, is of the low type; and looks well in a shed. It has positive let-off and take-up motions, a dobby and a boxing motion worked either with chains or cards. It has two weft forks. When a pick breaks the loom stops at the broken pick with the shed open. The pirns being used were six inches long and one inch in diameter. The loom will take up to 24 shafts. It is a sound job, has given satisfaction all over the world and is the result of many years practicel experience.

Leaving Ruti, we took the train up to the head of the lake and, after a pleasant walk in the sunshine, we caught the train to Horgen, to see the fast automatic pirn winder made by Brugger. It is a most ingenious machine. When we saw it, it was running most satisfactorily at 6,500 r.p.m., as against the 4,000 of the Scharer machine. Its best feature is the separately driven 22 pirn "giromat" magazine. The use of a separate drive ensures that, at whatever speed the spindle may revolve, the pirn changing always takes place at the same steady pace. It is a credit to its inventor and is a machine to watch with interest.



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# Textile Research Institute Demonstrates Practical Use of Research in Production

THE first annual meeting of the Textile Research Institute to deal entirely with the industry's production progress through research, was held at New York City Nov. 8. H. Wickliffe Rose, chairman of the institute's board of directors, was honorary chairman of this, the institute's 17th annual meeting. H. G. Ashcroft, chairman of the annual meeting committee, stated it was the first time a program of joint interest to production, research and mill executives had been given. The subjects of the speakers, the model demonstrations and textile exhibits were concise and definite examples of aiding production in textile mills through research. Every textile fiber and every branch of the textile industry was well represented in the overflow audience of over 500 attending.

Following the luncheon served to institute members and guests, Edmund B. Gregory, major-general, U. S. A. (retired), formerly World War II chief of the Quartermaster Corps, addressed the audience and stated: "Military planning in the United States, in the year preceding 1940, had been based on a defensive concept. The Army was clothed in textiles for fighting in Maine in summer and Florida in winter. So when we came into World War II the Army was ill-clothed to meet the global warfare with which we were confronted." He stressed that it is impossible to overestimate the importance of proper and adequate clothing in maintaining the efficiency of the fighting man; that clothing and such equipment such as a man can carry with him, and the food that is provided to him, must be relied upon to

#### T.R.I. NAMES OFFICERS and DIRECTORS

H. Wickliffe Rose of American Viscose Corp. was re-elected chairman of the board of directors of the Textile Research Institute during the organization's 17th annual meeting Nov. 8. Also re-elected were Lewis Sanders, president; Robert R. West, treasurer; and D. B. MacMaster, secretary. A. G. Ashcroft was named to the new position of vice-president.

Elected to the board of directors for three years at the membership meeting, which preceded elections to the board, were Ernest B. Benger, E. I. du Pont de Nemours & Co., Inc.; Andre Blumenthal, Sidney Blumenthal & Co.; Ephraim Freedman, R. H. Macy & Co.; Charles J. Huber; Edward S. Jamison, James Jamison Co.; Stewart Kilborne, William Skinner & Sons Co.; and W. Bailey Sellars, Burlington Mills Corp. Daniel B. Curll, Jr., Commercial Solvents Corp., was again named a director. Kenneth Wilson of Forstmann Woolen Co., was chosen to fill a vacancy in the 1948 group of directors, and Robert Burns of Celanese Corp. of America will fill in a vacancy of the 1947 group of directors.

protect him against a hostile environment and to maintain his fighting efficiency.

Reviewing his wartime experiences, General Gregory said: "While some preliminary study of this problem had been made, the first real attack upon it in our Army was initiated in July, 1940. The real analysis of our problems of cold-weather clothing and equipment, as well as of all quartermaster equipment, got underway on an accelerated basis with the formation of the research and development branch in the Office of the Quartermaster General shortly after the actual outbreak of the war. This branch was under the direction of George F. Doriot, later promoted to brigadier-general, to whom a large share of the credit is due for the very great strides which were made in the improvement of quartermaster equipment. These improvements were made through the application of scientific research techniques in determining what our actual needs were, in evaluating the continual flow of reports from combat areas, and in initiating and carrying forward research programs which reached back into fundamental science and industrial production methods.'

General Gregory gave full credit to General Doriot for bringing together a group of outstanding experts and scientists who understood as well as anyone did the problems of protecting men under extreme climatic conditions. These included mountaineers, Arctic explorers, men who had lived in the desert and in the jungles for years on end, and men who had studied the application of scientific principles involved in clothing problems. With these there worked a group of technologists from the various industries that produced the products. "It was determined early in the war that the most efficient use of textiles for cold-climate clothing was by the use of a wind-resistant, water-repellent fabric on the outside with a number of separate layers of insulating materials underneath," General Gregory said. Also, "The quartermaster research and development group attempted to find the most efficient materials which would meet this ob-

He cited the case of pile fabric clothing to indicate how the needs for a fabric for a specific use were determined by the following 16 functional requirements for Arctic clothing: (1) to have maximum warmth in terms of insulation provided; (2) to be capable of drying quickly; (3) to be of minimum weight; (4) to permit removal of accumulated frost easily by mechanical means; (5) to have high compressional resilience when worn under a parka or other wind-resistant garment; (6) to resist adherence of dirt; (7) to resist felting under long continued use; (8) to launder easily without shrinkage; (9) to be highly flexible so as not to interfere with normal body action; (10) to have good water-repellency; (11) to be water-vapor permeable; (12) to have a reasonable degree of wind-resistance; (13) to be free from creeping action when worn with other garments; (14) to have reasonable strength; (Continued on Page 76)

# RAYON REPORTS

Prepared Monthly by American Viscose Corporation, New York, N.Y.

NOVEMBER, 1946



# IMPROVED RACKS FOR ACETATE TRICOT SPOOLS SIMPLIFY SHIPPING, HANDLING AND STORING

A recently developed steel container of the skid-rack type, that greatly facilitates handling, storing and shipping of acetate tricot spools, has just been introduced by American Viscose. Similar containers now extensively used for beamed yarn have already demonstrated the greater economy and efficiency that the design affords over the old-style wooden boxes.

The new rack is in two sizes. One, holding four 21" spools, has overall dimensions of  $3'7\frac{1}{2}$ " x 3'9" x 4'9". The other, for twelve  $13\frac{3}{4}$ " spools, measures  $3'7\frac{1}{2}$ " x 3'9" x 6'1".

The rack incorporates simple-to-operate clamps that firmly lock the spools in place. And it effects noteworthy economies over older cases because of its ease of handling.

Representatives of American Viscose will gladly show customers the best way to avail themselves of the handling and other advantages that the unit provides.

### New Book on Tricot Fabric Designing Shows Basic Facts of Stitch Patterns

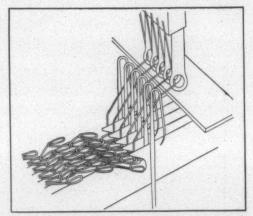
Written by Thomas Johnson, Sales Manager of Aveco, Inc., a new book, "Tricot Fabric Design" (McGraw-Hill Book Co., Inc., 124 pp.) has just been published. It is basic reading for those interested in the fundamentals of tricot fabric designing, and desiring a clear understanding of the drafting of tricot patterns.

Photographs and three dimensional drawings illustrate the book profusely. The drawings detail with exceptional clarity all the various

knitting elements of the tricot machine in their relative positions during a stitching cycle.

Following descriptions of the knitting elements and warp beams, the actual formation of a simple stitch is presented step-by-step in another series of graphic drawings. Such subjects as Function of the Pattern Wheels, Drafting the Pattern, Two-Bar Patterns, and many more essentials in the study of knit fabric design are included.

With this basic knowledge of



One of a series of 20 detailed, three-dimensional drawings which show the tricot machine's knitting elements in their relative positions during the stitch cycle.

stitch patterns, the designer is in a position to utilize the extensive capabilities of the tricot machine.

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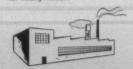
### RAYON ... 20 YEARS AGO

The largest American Flag ever made . . . will be of rayon! The entire ceiling of the Pennsylvania Hotel roof garden will be covered by it, according to plans for the coming American Rayon Exposition in New York.





A New York newspaper wag quips that if they keep on making more and more "silk" out of wood, we'll soon be able to use silk worms for bait! The electrical industry is now one of the largest industrial users of rayon, among a growing number of industries which are finding rayon ideally suited for many needs.



# North Carolina Association Has 40th Meeting

R. DAVE HALL of Stowe Thread Co., Belmont, was elected president of the North Carolina Cotton Manufacturers Association for the ensuing year as the group held its 40th annual convention Nov. 8 in Winston-Salem. Hearne Swink of Cannon Mills Co., Kannapolis, was chosen first vice-president, Karl Bishopric of Spray Cotton Mills, Spray, was named second vice-president, and Hunter Marshall, Charlotte, was re-elected secretary-treasurer of the association.

The retiring president of the association, R. L. Harris of Roxboro Cotton Mills, told the group that one of the most serious problems confronting the industry today is the survival of the free enterprise, which he described as being "the subject of severe and unfair attacks from many quarters," adding that these attacks, when analyzed, are not so much against the system as they are directed against the very necessary need to earn a profit. Mr. Harris cited figures released by the Treasury Department as an illustration of the small amount of profit being gained by industry.

Mr. Harris also advocated adoption of a public relations program to acquaint the public and the press of the state with the "aims and objects and services" performed by textile producers. "We have been prone to try to operate our plants with as little noise as possible," he said, "we have made no considerable effort at home or abroad to try to inform the general public with reference to our problems and our ambitions. Both the public and the general press are a little bewildered. A larger and more determined effort should be made to try to sell ourselves to those people who neither know nor have reason to be concerned about the problems which the mill managements face."

Dean Malcolm E. Campbell of the North Carolina State College school of textiles, Raleigh, outlined steps which have been taken in the past year at the school and told of plans for the future. He also stressed the importance of research, adding that the textile school now has an extensive research program headed by Dr. F. T. Peirce which teaches the students the importance of research and the manner in which it is conducted and utilized.

Members of the association were made acquainted with the history of their group when David Clark of Charlotte, editor of the TEXTILE BULLETIN, gave an account of the organizational meeting held in Charlotte Oct. 16, 1906, which he attended. "As one of the two survivors of the original group," he said, "I wish to pay tribute to them as

able men and as patriotic citizens."

S. Clay Williams, Winston-Salem attorney and industrialist, spoke at the luncheon meeting of the group and told the manufacturers that some measure is needed to check the continuing increase in wages, adding that "there is no telling what the price of goods is going to be." He also described as "double taxation of the worst kind" the system of a company making profits, paying taxes out of its profits and giving the rest to its stockholders in dividends.

Six directors were elected to serve for a three-year term as follows: J. Allison Cooper, Harriet & Henderson Cotton

Mills, Henderson; Carl R. Harris, Erwin Cotton Mills Co., Durham; W. L. Morris, Marion Mfg. Co., Marion; Hyman L. Battle, Rocky Mount Mills, Rocky Mount; S. M. Butler, Carlton Yarn Mills, Cherryville, and C. C. Dawson, Cramerton.

Presentation of certificates to winners of the 11th annual state-wide textile safety contest sponsored by the association and the State Industrial Commission was made by

T. A. Wilson, commission chairman.

Winners of awards included: Group One (125 or less employees)-Mill No. 2 of Quality Mills, Inc., Mount Airy, 177,200 hours without a disabling injury. Group Two (126 to 200 employees)-Reidsville Rayon Mills, Reidsville, 299,647 accident-free hours. Group Three (201 to 300 employees) -- Mooresville Cotton Mills Plant No. 4, Mooresville, 397,344 hours with no lost-time injury. Group Four (301 to 500 employees)-Lakedale Mills, Fayetteville, 649,789 hours with no lost time. Group Five (501 to 850 employees) - F. M. Holt Plaid Mills, Burlington, 1,037,782 hours. Group Six (851 to 1,150 employees) -No perfect score, but Mooresville Cotton Mills Plant No. 1 worked 1,432,899 hours with only one lost-time accident. Group Seven (1,151 or more employees) - Mays Mill of Cramerton Mills, Cramerton, operated 1,641,701 hours with a single disabling injury.

### Army Outlines Worsted Fabric Needs

All worsted mills should co-operate in supplying 10,700,000 yards of uniform material to the Army during 1947, the C. P. A. woolen and worsted industry advisory committee recommended at a meeting Nov. 15 with Civilian Production Administration and Army officials. Delivery schedules released by the Army call for 700,000 yards in February, followed by a million yards every month during the remainder of 1947.

In Army warehouses now is just enough material to keep contracted uniform manufacturers supplied until March, 1947, the War Department said, and unless industry furnishes the needed cloth, uniform stocks will fall below a minimum level need to supply occupation armies and troops undergoing training in the United States. The War Department said that contracts for fabrics have been revised to include readjustment clauses to protect producers against material price rises and labor cost increases during the manufacture of Army material. Additional provisions allow mills to substitute imported wool when domestic wool is not available.

The largest problem facing manufacturers is the anticipated disruption of civilian business caused by acceptance of Army orders, committee members said. But industry representatives agreed that Army needs must be met and pledged their support to the quartermaster program. Nonintegrated mills, which depend on other producers for tops and yarns used in the manufacture of serge worsteds, predicted difficulty in getting materials during the next few months.



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PLUS styling by LeRoy



Wool sports shirt by Leroy Shirt Co. at Lord & Taylor in New York, Roos Bros. in San Francisco.

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RESIN POR WOOL SHRINKAGE CONTROL

# Don't Overplant Your Village

By JOHN LEON HOFFMAN, Landscape Architect

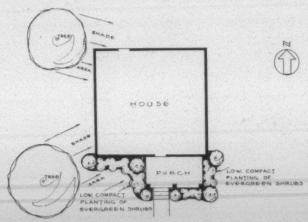
THIS is the time of year when many textile manufacturing firms with mill villages are thinking about planting shrubs and grass. Herewith is a warning not to overplant. It has been a general practice in the textile industry to leave the planting of shrubs and grass to some inexperienced person. This person sometimes is a nurseryman who has had experience in growing plants, but none in the arrangement and maintenance of grounds. Nurserymen, in a great many cases, are anxious to sell and therefore overplant in order to increase sales and profits.

Before any planting is contemplated, you should be warned that the lawn, or another area where plants are togo, should first be smooth and have sod if on a slope; otherwise, the ground will wash. Much less expense is involved with a simple planting of shrubs around the small residence. In addition, the smaller plants are not so costly to maintain and will be in good proportion to the house size.

Around houses with a floor level two feet above the ground it is advisable to plant Berberis Sargentiana, Ilex Crenata, Nandina Domestica and Abelia, the last being pruned to a low level. These four plants are excellent in sunny locations, but around houses which face the north or have a good deal of shade on the front, I recommend Aucuba Japonica, Mahonia or Euonymus Patens.

For houses with floor levels three to four feet above the ground, and in the sun, I suggest Ligustrum Lucidum, Abelia, Nandina and some of the flowering shrubs such as Spirea. In the shade, this height should take Euonymus Japonica, Euanymus Britzensis and Nandina Aquifolia.

Shrubs should be set back close to the foundation of the house where they will not interfere too much with mowing the lawn. The accompanying illustration shows a typical arrangement of this kind. Shade trees should be placed at the end of the porch when practical, or back in line with the porch so as to be out of the lawn proper and give better shade efficiency. Trees planted on the street usually are abused, roots break sidewalks, and branches hang down in the way of pedestrians and automobiles when weighted



Desirable plant arrangement, as drawn by the author.

with water, snow or ice. It goes without saying that trees should be placed to the rear of houses exposed to the south or west sun.

Where no trees exist, it is a good idea to employ both slow-growing or permanent trees along with a fast-growing tree. It is thus possible to have shade soon after a house is occupied, and later cut down the fast-growing trees after the permanent ones have developed sufficiently.

A depression should be left in the lawn area surrounding a tree to hold water and to recess the mulch of leaves, peanut hulls or other materials which are used to retain water. This protected area will prevent bruises from lawnmowers. A great many trees are killed as the result of careless mowing.

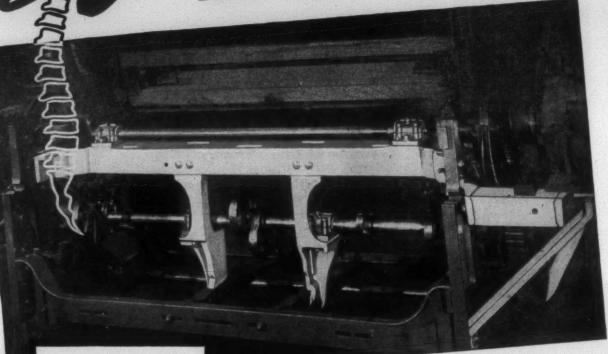
Slopes which are too steep for grass, or too steep to be cut with a mower, should be planted in some shrub which grows close to the ground and forms roots which will prevent erosion. For large, steep areas there is nothing better than wild evergreen honeysuckle and the thorny single white rose (Rosa Bracteata); for smaller areas use Jasmine Nudiflorum and Jasmine Floridum; and in shady places plant English ivy, small-leaf Periwinkle Vinca Pachysandra or Ophiopogon.

### New Use Found for Rayon Staple

A new development in connection with viscose rayon staple is its use as a carrying fiber in asbestos roving, yarns and fabrics, according to American Viscose Corp. Asbestosrayon roving is now designed and used for insulating electrical conductors such as heater cords and iron cords, and the wires for electrical fixtures. The asbestos-rayon roving is also drawn into yarn and woven into a wide variety of utility cloths such as insulating blankets, heat-resistant clothing and gloves, fire-resistant curtains, brake lining, conveyor belting, packing, and numerous other textile materials where good strength and resistance to heat is desired.

The slow burning of asbestos-rayon roving makes it ideal for lamp mantles and wicks in cigarette lighters. Another application which is receiving much attention is asbestosrayon webs and woven fabrics for use as a base for laminated plastics. The development of this new combination of fibers commenced during the war, when the supply of spinnable grades of asbestos became extremely scarce. The highly serrated edges of viscose rayon fibers and the permanent curliness or crimp that may be imparted under controlled methods of manufacture suggested this rayon as an ideal carrier of the fine, slippery asbestos fibers. The controlled fineness of the rayon fiber, its strength and length of staple, were also found to be important contributing factors in promoting cohesion and strength in the asbestos web, roving and yarn. The net result of using rayon with asbestos has been to achieve added strength and a more uniform yarn of higher asbestos content.

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- 1. Eliminates destructive vibration
- 2. Improves quality of fabric
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- 4 Stabilizes loom making faster speeds possible
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On a model farm near Sylacauga, Ala., location of the Avondale Mills headquarters, research has determined which grasses will grow best the year round in northern Alabama soil, thus furnish farmers inexpensive cattle feed.

# Comers Work For Farmers' Salvation

By DAVID MARKSTEIN

THE farmer who ekes out no more than a bare existence from impoverished soil isn't likely to make a good customer. So, in order to build customers for their cotton products, a trio of northern Alabama industrialists have set up a soil conservation program in their state that is proving a life-saver for the farmers roundabout. The trio are Donald, Hugh and Bragg Comer. They own and operate Avondale Mills. The Comers have taught Alabama farmers how to raise cattle as well as cotton—and make a double profit while, at the same time, keeping the land enriched.

Planting cotton year after year depletes the soil alarmingly. This fact has been realized for a long time by the farmers of Alabama, but alternative they faced made it imperative to continue planting the South's staple. For clover, which is the natural rotation crop, isn't worth much on the market. It was then that the Comers stepped in with a message: pasture cattle on the clover.

That course had been tried before, too. Cattle-raising had proved profitable—in the summer only. When winter cold destroyed the grasses on which the cattle fed, the farmers found that they faced a sharp dilemma. It was necessary to either butcher the cattle then and there, or to feed them silage. The Comers provided a way out of this dilemma by a development program, carried out on a model farm located near the main plant at Sylacauga, Ala. Here, working year after year since 1935, the Comers have discovered which grasses will grow best for 12 months in the Alabama soil and, at the same time, furnish the most nutritious kind of cattle feed. Their answer: lespedeza hay and Johnson grass.

The Sylacauga model farm is not what might be called the last word in Southern farms. It is not meant to be. It is an ordinary northern Alabama farm—exactly like the hundreds of other farms around it except for one thing: it consistently makes a profit much higher than does the average. Hugh Comer, whose title is president of Avondale Mills, operates the Sylacauga model farm as his personal baby. He forbids use of any equipment not available to any Alabama farmer so the farmers may see exactly what might be done with the tools right at hand.

It was here that a clover program was worked out to develop year-round grasses on the pastures of Alabama farmers. Hugh calls the project's result: "A green mat to welcome agricultural progress in the South." The Sylacauga model farm has proven two valuable points: (1) that cattleraising can be infinitely more profitable under the local conditions than cotton farming; and (2) that green feed fattened the cattle many times better than did the store feeds.

The farm held a winter field day recently, to which 400 farmers from counties all around the project were invited. So the place would look its best, Hugh Comer decreed that the cattle be taken off grazing (Continued on Page 80)



Donald (left) and Hugh Comer of Avondale Mills believe that it is good business to keep your neighbors prosperous.

## Every Department Benefits when Carding is Uniform

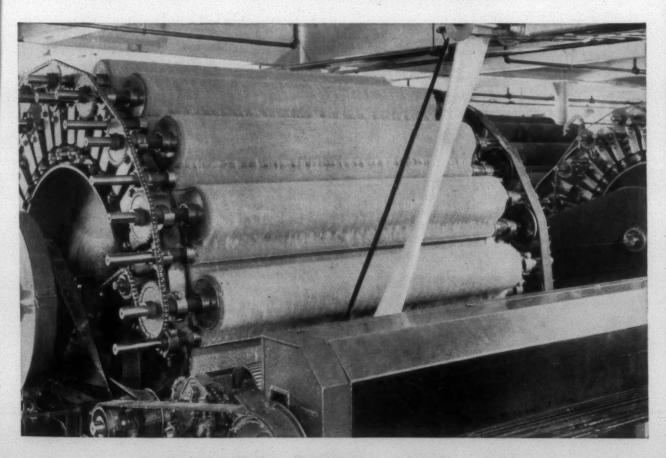
#### TUFFER PRODUCTS

Card Clothing for Weolen, Worsted, Cotton, Asbestos and Silk Cards • Napper Clothing, Brush Clothing, Strickles, Emery Fillets. Top Flats Recovered and extra sets loaned at all Plants. Lickerins and Garnet Cylinders from 4 to 30 inches and Metallic Card Breasts Rewired at Southern Plant • Midgley Patented, and Howard's Special Hand Stripping Cards • Inserted Eye & Regular Wire Heddles

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Expertly applied and properly operated Tufferized Card Clothing will produce the fine even web free from "nibs" so necessary for efficient spinning and weaving.

If you suspect that uneven carding is hampering your spinning room and weave room have a Howard representative inspect your card clothing. He will detect and report the cause and make suitable recommendations.



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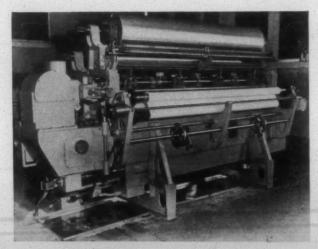
Canadian Agents: Colwool Accessories, Ltd., Toronto 9

## The Flying Needle Frame

By WALTER CLARK, Field Editor

AST month at Marcus Hook, Pa., American Viscose Corp. opened the doors of its textile research department for the first United States showing of the flying needle frame. Developed and manufactured by F. N. F., Ltd., of England, and with A. V. C. as selling agent for the United States, the flying needle frame is a 28-gauge, 84-inch, twobar, high-speed warp knitting machine capable of an amazingly high, sustained production rate. Designed for an approximate theoretical maximum speed of 1,400 r. p. m., or courses per minute, an F. N. F. machine reputedly was operated in England during a 31/2-year period of the war on a double shift under factory conditions at a continuous rate of 1,000 courses per minute, which is claimed to be the normal cruising, or day-in, day-out, speed for the machine. The machine on display at Marcus Hook, rigged with a typical American beam assembly, was producing jersey cloth from 75 denier dull acetate at the rate of 1,100 courses per minute.

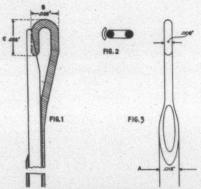
Heart and soul of this amazing machine is a truly revolutionary type of needle. Radically different from the conventional hooked or bearded needle, the F. N. F. needle is of tubular construction with an outside diameter of .018 inch and .012 inch inside diameter, and closely approximates the tubing conventionally used in hypodermic needles. The tongue, designed to operate within the needle, is also of tubular construction and is so capped at its extremity as to fit snugly over the needle hook (second illustration) when pushed into a forward position. Construction of this cap permits the total vertical dimension of the needle hook to be reduced from what it would be if it were of circular crosssection, and at the same time, it is claimed, the greater hook capacity plus the positively activated hook closing member allows the needle to accommodate an aggregate of 400 denier, or equivalent count. The needle and tongue, for ease of handling, are set in lead castings in units of four to a set. Both needle and tongue are independently driven, which fact, together with the short hook and a small needle



Front view of the F. N. F. warp knitting machine.

movement of .42 inch are the basic secrets of the extremely high F. N. F. operating speed.

Complete elimination of cams from the driving mechanism is another interesting feature of the machine. In the words of the manufacturers, "The F. N. F. needle and tongue allow a sufficiently great latitude in timing for us to employ crankshafts as prime movers to our different assemblies holding the knitting elements. In terms of engineering this means that all the F. N. F. knitting movements other than shogging are obtained by the use of a multiplicity of eccentrics or crankshafts, which can of course be perfectly balanced."

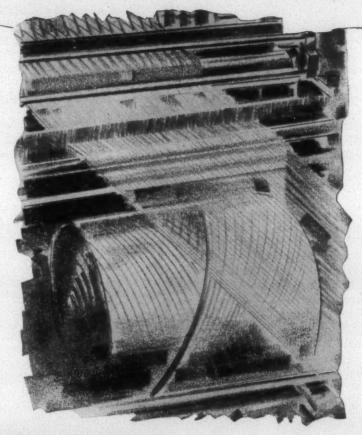


Cross-section of the F. N. F. tubular needle.

Other claimed features of the machine include: (1) Accurate yarn tension control at very high speed through use of a .014 inch thick, three-inch wide radiused aluminum beading dull chromed strip steel tension bar with a maximum movement of about .35 inch; (2) Consistent quality through a positive electrically controlled let-off which automatically slows up or accelerates the beam and assures yarn delivery from the beam at the right speed regardless of beam size; (3) Use of beams instead of section bobbins, giving a resultant yarn package the inaccuracies of which will be constant; (4) Dropper type stop motion; (5) Controlled expansion of bars permitting a rise or fall of about 15 degrees temperature without resetting being required; and (6) Ease of maintenance due to vertical elimination of needle breakage, fixed timing due to crankshaft assembly, and a forced feed lubrication system based on conventional automobile and aircraft engineering practice.

The versatility of the F. N. F. needle opens interesting new possibilities in the field of warp knitting. Among the fabrics on display were 48-inch dress goods and beachwear of 1/56s viscose Fibro C. C., 60/16 denier Delustra viscose, and 100/40 denier Seraceta acetate; 52-inch shirt and blouse material of 200 denier acetate; 48-inch outer garment material of 75 denier acetate and 75 denier viscose; 48-inch material suitable for blouses, lingerie, etc., of 60/16 denier Delustra viscose; 48-inch locknit fabric of 75 denier viscose and a similar 40-inch fabric of 75 denier nylon; and 48-inch material for lingerie and men's underwear of 1/30s Fibro.

## "Realited alago" ...with Agood spindle oil"

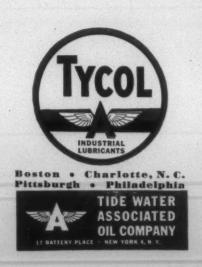


CNOT a single tube lost . . .
Reduces spindle drag . . .
Reduces bolster losses . . .
Steps up production . . .
Cuts down on maintenance costs . . . ??

— says a textile mill operator. "With Tycol Spindle Oil," he goes on, "we're able to operate continuously at top speed — and we don't have to worry about the oil losing its body at operating temperatures."

For further information about Tycol Spindle Oil, get in touch with your nearest Tide Water Associated Dealer.

LUBRICATION - "ENGINEERED TO FIT THE JOB"



## Eastern Carolina S.T.A. Has Fall Meeting

A DISCUSSION of problems relative to carding, spinning, slashing and weaving was held Nov. 2 at the Erwin Mills Auditorium, Durham, N. C., by members of the Eastern Carolina Division of the Southern Textile Association. The chairman of the division, Sydney Green, vice-president of Eno Cotton Mills at Hillsboro, N. C., presided. An abstract of the stenographic report taken during the meeting follows:

#### Carding Discussion

THE CHAIRMAN: The first subject on the program is carding, and under that we have three headings—card stripping, nep control and sliver preparation. The first question is "What system of stripping do you use? Give advantages of your system." Is there anyone here who wants to talk about his method of stripping—the type of stripping he uses and how he likes it?

ROY E. DIXON; overseer of carding, Rocky Mount (N. C.) Mills: Our system is vacuum stripping. We have two pumps, a centrifugal pump and a larger one which is a fivesection pump. That produces 7.5 inches volume. The smaller pump, the centrifugal, produces somewhat less volume. We have the two pumps so that if one should break down we could use the other to strip our cards. We also have five tanks. Two are for card strips, one is for our waste mill strips, and the two others are for the waste picker and waste mixing room. The tanks are on the first floor of our mill; they are situated in our waste mixing room, which is on the first floor. A series of six-inch steel pipes leads to our cards. The six-inch pipe has outlets to each card. The outlets are three inches from the card to the overhead main pipe. Our tanks will produce from seven to nine pounds pressure in each tank. We use only one tank at a time. It will strip as many as six cards at once, but we do not get as good stripping while we do six cards as we do with only four. Right now we are making it a practice to strip four

We find that with this system the cards are much cleaner; there is not the dust that there would be with the stripping roller. It is safer, because there are no ropes or pulleys; and in my opinion it is much cheaper, because of the fact that it takes only one man to operate the system. It is very simple to operate; there is nothing more to do than to open the valves and allow the air to pass through the doffers and cylinders. The pipe or cable is fastened to a worm on the card, from one side of the card to the other. As you, put your gears in mesh the pipe automatically goes from one side of the card to the other, and the vacuum, of course, strips the card.

We use this system also for cleaning out motes underneath our pickers. In our waste unit we use it for sucking the motes, fly, etc., from our waste mixing room to our waste tower. In the waste room itself we use it for cleaning out the picker, cleaning out motes and fly under the cards, and also for stripping the cards and for sucking the flat strips over to our waste line. As to how often we strip our cards—at present we have a total of 212 cards, 205 of

which are in operation at all times. We strip now between two and three times a shift, depending upon the condition of the clothing. If the clothing is in good condition we strip twice, with good results; if it is not in good condition we strip three times.

EDWARD C. HORNER, overseer, Oxford (N. C.) Cotton Mills: Do you find that this vacuum stripping system strips the cards as thoroughly as the so-called hand stripping?

MR. DIXON: We do use the stripping roller once a week. It will not do as well in case a seed or bit of leaf or something like that gets imbedded down near the foundation. It will not take that out, but we overcome that by stripping once a week with the strip roller and also stripping the doffer and cylinder when we get ready to grind.

MR. HORNER: Has anyone a newer system than the vacuum system? I do not mean that it is altogether new, but there is one with a larger opening or nozzle pipe. You recall that the first vacuum stripping systems installed had something like a half-inch pipe. I understand that the newer systems on the market today have a larger pipe and also a larger opening from the nozzle to the doffer, which of course gives a larger volume of air.

MR. DIXON: This system we have has been in about a year, I understand. The mouthpiece to the doffer is about a half-inch, and the nozzle going to the cylinder is an inch square. I do not know whether that is the latest thing put out or not...

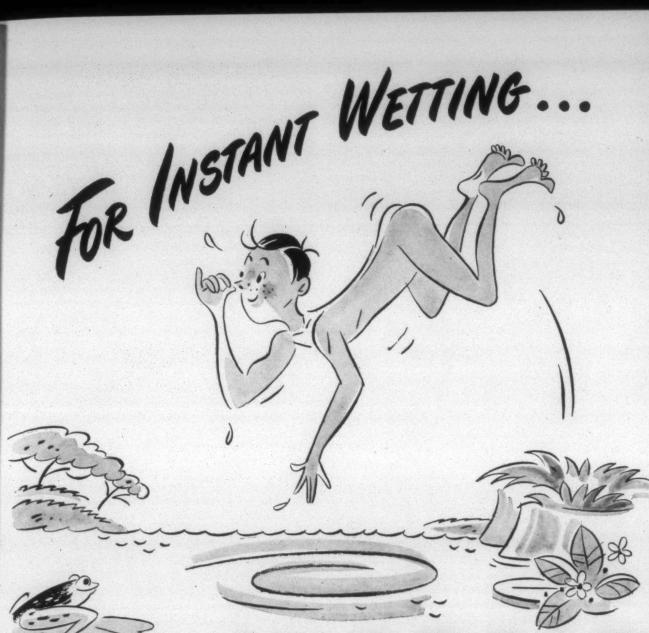
MR. HORNER: If you get the same amount of vacuum on the larger pipe as with the smaller pipe you can do a better job of stripping.

M. R. HARDEN, superintendent, Erwin Cotton Mills Co., Durham: We have a system which I suppose is the newest system out, because they finished it up just about the time the war began. I do not know how long it has been in, but it is three or four years. It has a much larger pump. It is a centrifugal pump, and there are two tanks. We do not do any hand stripping at all. I am not sure how many cards we could strip, because it handles so many at one time. I suppose there is a limit on it, but we have not run into that limit. It is 50 h.p. I should like to ask if the gentleman who is pulling out motes from the pickers and sucking them back to his waste house does anything like that on his cards. Does he pull out his fly?

MR. DIXON: I think at one time they did try it in the main mill and ran into some difficulty. I think it was more or less psychological—that they did not want to put it in. We do not have the attachments for that now. It would take very little work or time to put it in. All we would have to do is separate the pipe, put in a few joints, and run the flexible cable from there. It has run very well elsewhere, so I do not see why it would not work over there.

CHAIRMAN GREEN: I should like to know how far it is from the motes and waste to the waste house. Does that have any bearing?

MR. DIXON: It is approximately 50 yards from our main mill. In other words, our waste house is on one side of the street, and the mill is on the other side. So the motes, fly,



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## JACQUES WOLF & CO.

PLANTS: CARLETANT N. L. LOS ANGELES CALLE

OTHER PLANTS: CARLSTADT, N. J. - LOS ANGELES, CALIF. WAREHOUSES: Providence, R. I., Philadelphia, Pa., Utica, N. Y., Chicago, III., Greenville, S. C., Chattanooga, Knoxville, Tenn.

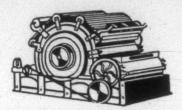
etc., are sucked from the machines over to there. That building over there is about 75 feet long.

THE CHAIRMAN: How do you pick up the motes, etc.?

Do you go around and do that by hand?

Mr. Dixon: We use two methods. We have a flexible cable under the picker, and there is enough vacuum that the motes will go into the pipes of themselves. We also have a lead pipe down on the floor and brush the motes, etc., up to the pipe. We do that in our mixing room. But in the picker room we use a flexible cable and push the cable to approximately underneath the feeders and with a homemade rake brush the motes up to the nozzle.

CHAIRMAN GREEN: Do you have some method of feeding the motes in?



MR. DIXON: We have a schedule and do that at 7:30 in the morning and at 5:30 in the afternoon. We run the pump for stripping the cards 24 hours a day. On the other pump, which is used for sucking our motes, strip, etc., across the road, we have a schedule worked out. We clean the pickers at 8 o'clock every morning. At 8:45 we strip from there to our waste bin. After we get those strips it is set up for card fly and so on. We have a definite schedule for each type of waste that we pull over to the waste house.

VIRGIL E. McDowell, assistant superintendent, Rosemary Mfg. Co., Roanoke Rapids, N. C.: I should like to ask Mr. Dixon and Mr. Harden if they strip with the feed cut out or left in and how much waste they allow and how

long it takes to strip the cylinder?

MR. DIXON: We run two strippers, and each of the strippers will have half of the cards. I do not mean to imply that we have to have two strippers who do nothing but strip; they have other duties besides that. But we have two stripping at a time. They have four cards behind them running full. Running a 60-grain sliver, it takes one minute and six seconds to strip a card. That allows about five minutes, then, to let the sliver get up to full weight.

CHAIRMAN GREEN: You run that out on the floor and

MR. DIXON: Run it out and cut it off then. I ran some tests to find out about how long it takes to run the weight back up and found that if it runs five minutes I do not have to worry about its being on the light side.

T. W. MULLEN, general superintendent, Rosemary Mfg. Co.: Both these gentlemen use the reciprocating pump. How about the piston-type pump? Does anybody here use that?

MR. HORNER: We have the piston-type pump on the vacuum system. I think we have about 14 or 15 pounds vacuum there. I think this gentleman said he has seven pounds.

Mr. Dixon: Seven to nine.

MR. HORNER: I do not understand that difference. What

is the standard on that vacuum system?

MR. MULLEN: I think someone here can clear that up. One is inches of mercury, and the other is pounds pressure. I think probably Mr. Harden has inches of mercury; and some of the older systems, I know, are pounds pressure.

D. F. Burns, superintendent, Durham (N. C.) Hosiery

Mills: We have a system, and this new pump requires ten to 12 inches of vacuum. I guess that is what you call the mercury. But that old system we had required about 25 or 26. That is what we run ours—around ten to 12, and we strip three cards at a time.

CHAIRMAN GREEN: I am not sure but that we are getting away from what your committee had in mind in planning this program. We are trying to find out what is the best system. We should like to know whether vacuum stripping is better than stripping with the old roller and how often you do it. I think that is what your committee wanted to know, rather than have you go into too much detail as to how these machines are set up. Is there anyone who thinks the old roller system is better than the vacuum stripping? If

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D. F. LANIER, superintendent, Oxford (N. C.) Cotton Mills: I have used both. We think the vacuum system is easier on the man. If you use your stripping roller every week or ten days the vacuum system will do just as good work, and it will be easy. We have had ours for some time; I reckon it would be called obsolete today, although it is doing a very good job. We like it better than we do the hand system.

CHAIRMAN GREEN: Next, tell us how often you strip and how many pounds you are putting through your cards. How often do you strip, Mr. Lanier, on your vacuum strip-

Mr. LANIER: Every three hours. The production is 12 pounds per hour-that is what is not under the cards. We

let a lot of it go under the cards.

GEORGE GILLIAM, superintendent, Sterling Cotton Mills, Franklinton, N. C.: We have the vacuum system and like it much better than the old system. We strip every three hours and have 18 pounds production on the cards. We also use the brush once in 24 hours and find that is better. Our clothing is not in the best condition. We are remedying that, but we find using the brush once every 24 hours helps.

CHAIRMAN GREEN: What do you do on the three-hour schedule? Aren't you running eight hours on the shift?

How do they know when to strip?

MR, GILLIAM: We have that arranged so the men have other duties on certain shifts. One shift will have to strip three times and the next shift only twice. It runs eight in 24 hours and works out about right. It may not work out exactly to the minute, but it is all right.

RALPH H. HIGGINS, overseer of carding, Roanoke Mills Co., Roanoke Rapids: We have had the continuous stripper running on cards for several years. I have been there around three years now, and we are very well pleased.

CHAIRMAN GREEN: Do you find you have to grind your cards any more?

Mr. Higgins: Well, we grind them every ten days. That keeps them in pretty good condition. We strip once a week.

T. ROBBINS LOWE, sales engineer, Saco-Lowell Shops, Charlotte: There are probably between 5,000 and 6,000 cards in the United States that use continuous stripping. I should like to put in another plug for the continuous stripper. After stripping the sliver is light, and it takes some time for it to build up. With continuous stripping it is the same weight all the time.

G. E. Moore, superintendent, J. M. Odell Mfg. Co., Bynum, N. C.: What is the difference between the con-

tinuous stripper and the fancy?

Mr. Lowe: The continuous stripper consists of two needle bars which operate at the back of the card, right above the licker-in. The fancy consists of a solid-wound roller which operates in front of the card. Their action, I would say, is similar in that they keep the stock picked off the cylinder and keep the cylinder from reloading. You would use the fancy probably more on waste, wool or nylon.

MR. HARDEN: The gentleman back there said he grinds his cards every ten days. That is several times more than usual. It seems to me he is going to wear his wire down and cut down the life of the card clothing, which is pretty ex-

#### Nep Control

CHAIRMAN GREEN: We had better go on to the next heading, which is nep control. The time is getting away from us. The first question under that heading is: "What system of detection, prevention and elimination of neps do you use?" Next, "Do you use a special nep-count apparatus, or do you have other means of determining the number of neps in stock from pickers and cards?" There is a machine or apparatus out with which you can take a piece of the card web and examine it for neps.

J. FRANK HAY, research, Rocky Mount Mills: There seems to be a good deal of confusion as to what the Nepscope is. I presume it is for nep-counting purposes. Before the war we did have a research department and a research program, and we had to keep better control on our quality than we do now. At that time we were using a board with black felt on it. We placed that under the web on the card and took a section of that web out and counted the neps per square inch.

CHAIRMAN GREEN: We go by a card and, if we do not see any neps, we think the work is good; if it is loaded with neps we get someone to work on it. But these days we think we ought to check everything, so we are glad to get some kind of nep control on our cards.

MR. MULLEN: I should like to ask a question. Is anyone here using the new perforated cylinder screens? If so, I should like to find out if that screen increases the neps or decreases them.

Mr. Lowe: In reply to Mr. Mullen's question I might say that on all new cards that is the standard equipment, and all cards that have been sold by Saco-Lowell in the last year or two have been equipped with what we call the waste control screen. It is perforated steel, and it does not bend. You can set to it. I should like to ask Mr. McDowell a question. How would a perforated metal screen increase the neps? Why would it make more neps?

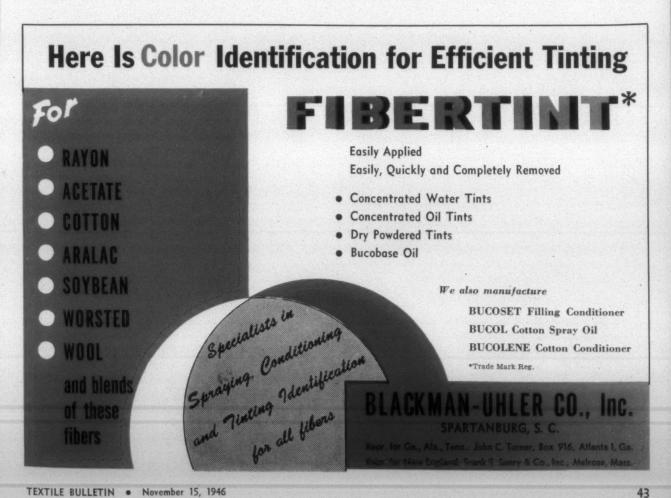
MR. McDowell: That is the point. I think they claim that the perforated screen takes out more flat strips and cuts the loose fly. I just wondered whether, with that type of screen, there is any roller in there or anything along that

line, that would cause more neps.

MR. HIGGINS: We have those and like them very much. The reason we got them is that we got some new cards and found what they did, and we went ahead and put them in on the old cards.

#### Sliver Preparation

CHAIRMAN GREEN: Let's go on to the third heading, which is sliver preparation. The (Continued on Page 67)



## Dyeing and Finishing

## Problems Connected With Dyeing and Finishing Synthetic Fabrics

By WELDON HELMUS, Fair Lawn Finishing Co. Before New York Section, American Association of Textile Chemists and Colorists

IN the dyeing of synthetic fabrics the first problem is to determine the method to use in producing the best results for the particular quality involved. The machinery that is generally used is either the dye beck or the dye jig. In addition, there are continuous machines which have their place in certain applications, particularly where large volumes of materials are to be dyed in the same shade. Of all the machines mentioned, the dye beck is one of the best machines to use to retain maximum shrinkage in the fabric. The dye jig is best suited for the flat fabrics, such as taffetas, oxfords, and satins, but even these constructions can be damaged by unevenly applied tension or excessive tension which would tend to make the cloth extremely thin and to produce a very unsatisfactory finished fabric.

In the newer developments of dyeing with the continuous vat machines, there are certain problems which take a considerable amount of time and experimentation, on the part of the dyer, before the best results are obtained. In the case of the Williams unit, the goods are normally pigment padded, followed by reduction at high temperatures on the unit. The reducing liquid and cloth pass through a closely confined space heated automatically by baffles. It is necessary to add pad liquor to the reduction unit in order to attain equilibrium of the liquor and thus correct for shading at the start of the run. In the pad steam method, reduction is accomplished in a steam medium. The vat pigmented material is impregnated with the reducing solution on a second padder, followed by a short steaming. Applying vat colors by this method creates certain limitations to combination fabrics containing acetate or wool, due to the use of caustic at the higher temperatures of ageing. The vat acid method has produced some very interesting results. The more rapid conversion of the vat acid to the sodium leuco, as compared to the corresponding vat pigment, speeds up the rate of dyeing and permits a reduction of temperature and alkalinity which minimizes damage to the protein

Before dyeing any of the synthetic fibers a tremendous amount of laboratory work must be carried out both by the dyestuff manufacturers and the dye house. In order to obtain level dyeing it is first necessary to get dyestuffs that are compatible. They should have similar rates of exhaust, good solubility, good leveling power, preferably colors that do not exhaust too rapidly, and those that attain maximum exhaustion at approximately the same temperature.

There are many variations in yarn which cause no end of trouble to the average dyer, particularly when the weaver is not conscious of the variations of dye affinity of the yarns

with which he is working. In the case of viscose being produced by three or four different manufacturing companies, it is known that a controlled dye bath will produce considerable variations of shade from one manufacturer's yarn to another.

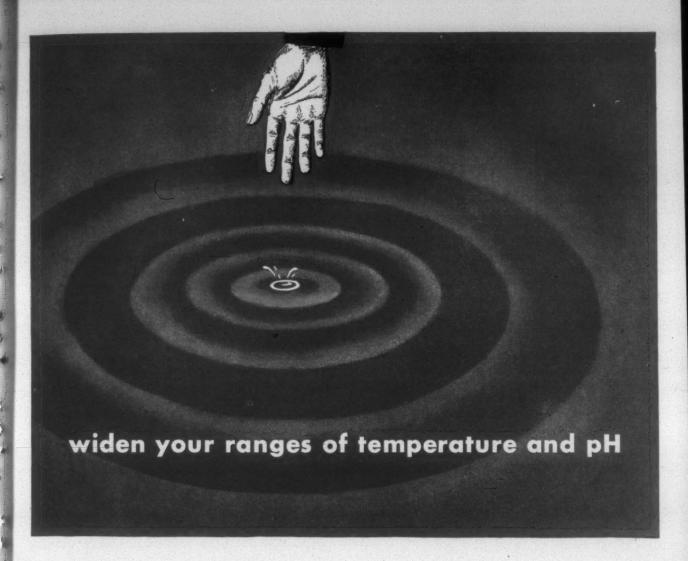
In the case of acetate yarns it has been found that certain manufacturer's yarn will dye more rapidly, and give better money value than others. It has also been noted that in these same acetate yarns some brands resist saponification to a greater extent than others, and this resistance to alkali is, in general, inversely proportioned to the rate of dye absorption.

In the case of nylon it will be noted that certain acetate colors dye nylon in an entirely different cast than they would produce normally on acetate. Due to certain factors the leveling of nylon is not as good as that produced in other of the synthetic fabrics. The warpiness seen in all nylon dyed fabrics shows up, whether they be dyed with acetate, acid, premetalized chrome, or chrome colors, although the acetate colors level better than the others.

Aralac, as manufactured today, is received in an acid condition, therefore, it is most important that the pH be controlled carefully in dyeing to obtain the levelness expected. In a mixed fabric containing aralac, viscose, and acetate, if no attempt were made by the dyer to neutralize the aralac, all of the color would immediately draw a very heavy shade on that yarn and very little on the viscose. However, if the aralac were dyed in a strong alkali condition, most of the color would go on the viscose, leaving the aralac with little or no color, and at the same time ruining the protein fiber

In the past it has been recognized that certain colors, when applied on acetate rayon, fade when subjected to gas fumes, and that the same colors used on nylon do not fade at all. Therefore, it has been the practice to use certain chemicals to inhibit the material against this type of fading. Some of these older materials did an extremely good job, as far as improving the gas fading fastness goes; but in some instances they reduced the light fastness of the dyes used. Some of the newer types have the added advantage of protecting the material after repeated washing or dry cleaning. It is my belief that the most recently developed inhibitors are a step forward but, in view of certain discolorations produced by the inhibitor itself in the gas chamber, it is obvious that the ultimate has not been reached and that improvement is still desirable.

The machinery used in finishing operations is substantially the same as was used before the war; however, there are certain improvements which have been extremely helpful to the dyer. Because of the changes in requirements for finished piece goods, the drying equipment has become vitally important, and, therefore, efficiency has been increased tremendously through the addition of new heat exchangers and improved bowling apparatus. Previous to the introduction of a continuous dyeing equipment and the application of resinous finishes, a piece was dried once, or possibly twice, from the beginning to the end of the dye-



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ing and finishing operation. Today, pieces are dried as many as five to six times, depending on the requirements.

The war has brought about consciousness of specifications to meet different requirements in regard to the end use of fabric involved. This has made it necessary for the finisher to become well acquainted with materials to produce anticrease finishes, water repellent finishes, anti-slip and anticrock finishes, abrasion-resistant materials, and anti-fume inhibitors. Resin treatment has been used more extensively in the past few years, and with it have come many problems affecting both the color and touch of the finished fabric. The urea formaldehyde type of resins, in general, are harmful to the light fastness of many colors. Therefore, the selection of color for material that is to be after-treated with this type of resin is extremely important.

Temperature control in finishing has become extremely important for many of the new applications, and, fortunately, the manufacturers of temperature-controlling equipment have done an excellent job along these lines. Today curing units running to temperatures above 425° F. can be controlled at any given degree plus or minus 2°. The continuous boil-off machine has become very useful in washing out resin-treated material, not only from the standpoint of removing free chemicals, but also from the standpoint of

reshrinking and reconditioning the fabric.

Glass is one of the newer synthetic materials and it has become important in the drapery field because of its fireresistant qualities. The dyeing and finishing of this fabric is being handled as a separate subject, because it is so entirely different from anything handled previously by the average dyer. The dimensional stability is such that ordinary dyeing and finishing equipment has to be adjusted to handle this fabric satisfactorily. At present, most of the glass being dyed is scoured and subsequently dyed with a finely dispersed pigment in a resin binder. This, of course, furnishes a surface dyeing on the glass filament. In many of the darker shades it is necessary to apply a finish over the resinous dyed material in order to minimize the crocking apparent with this treatment. At present, new binders and sizing materials are being applied to glass fibers in order to improve dyeing procedures. This work is still in the experimental stages and may improve the color index or dye affinity of the material. It is also hoped that these new materials will materially aid abrasion resistance.

#### **Printing Mixed Fabrics**

By G. A. NORTHRUP, JR., Waldrich Co.. Before New York Section, American Association of Textile Chemists and Colorists

THE many problems involved in printing mixed fabrics require frequent changes of printing methods and color types. It is difficult to predict just what result will be obtained on a given fabric. A color which is satisfactory on one mixture is not good on another of the same fiber type. As new fibers are added to the list of the old ones, the problem of printing these qualities becomes more and more complex and varied.

The most important cloth produced with mixed yarns is probably a spun-viscose rayon, spun-acetate blend. This cloth runs from 25 to 60 per cent spun acetate, both warp and filling. When necessary, these cloths are first given a

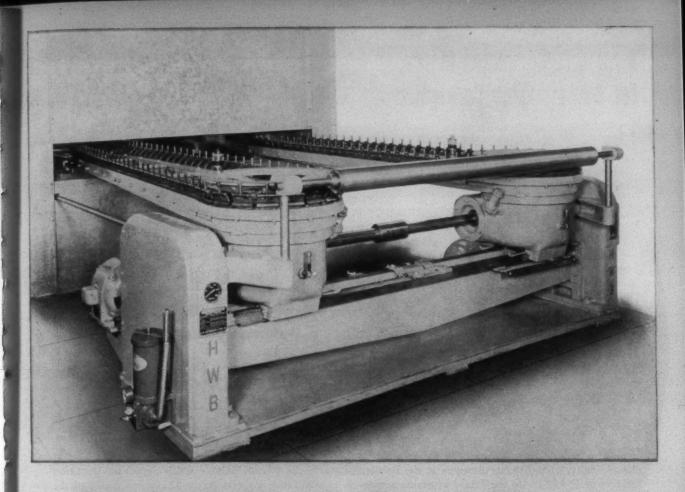
desizing treatment. They are then boiled off on the reels and dyed with direct and developed colors chosen for the least staining effect on the acetate fiber. Some of these qualities are saponified. On the reel and dyed solid shades before printing, the cloth with the lowest amount of acetate gives the strongest color value since vat colors print stronger on viscose rayon. These fabrics are usually dried on dry cans because they are usually too heavy for air drying. They may or may not need padding after printing. These cloths print well without backgreys on the new type blanket washers. All heavyweight cloths work equally well on this blanket. On some lighter materials paper backgreys are used instead of cotton backgreys.

A great deal of work has been done on discharge printing of acetate fabrics. Hydrosulfite D was first tried with sodium thiocyanate. Later zinc thiocyanate was tried and gave a better discharge on medium ground shades. Attempts to discharge dark shades to a pure white were not successful. At present large quantities of all-acetate and acetate mixtures are discharge printed in single-color white. In most of this work the goods have to be dried carefully after printing to prevent mark-off on the fabrics. These mark-offs occur more frequently on mixed fabrics, since the acetate is difficult to discharge and the rayon or cotton in the mixture is more easily affected by the discharging and swelling agents. A further precaution against mark-off is to dry the goods after ageing. It is also good practice to wash these goods thoroughly as soon as possible, since materials left in the discharge portion of the print can cause a transfer of the pattern during the subsequent finishing operations.

Great quantities of acetate and rayon have been printed as saponified cloth. These goods are boiled off in the open width and later are saponified on the reels. The softer fabrics and those with a small amount of acetate seem to work best in this process. A regular 100 denier acetate and rayon crepe is easily saponified, dyed with direct or diazotized and developed colors and printed with vat colors by this process. Mill tests made with can-dried saponified fabrics versus dry-box dried fabrics prove conclusively that better printing is obtained on the air-dried goods.

Aralac usually appears blended with rayon and spun rayon in plain weaves and twills. These fabrics contain 50 per cent aralac. The heavy twills are difficult to print because they require heavier engravings and higher hydrosulfite content in the vat colors. Better whites are obtained by boiling out the dark ground shades in a reel of hot water running continuously or passing through the regular washers before printing. Some mixtures of acetate, aralac and viscose rayon are being printed. On this mixture of three fibers vat blacks give a better shade than diphenyl or aniline black. Vat blacks and all strong vat colors have to be washed very carefully on this fabric because the colors soap off the aralac and acetate fibers and stain the grounds.

The latest fiber to appear in mixtures for printing is cotton. This is being printed as a cotton-acetate mixture similar to the rayon-acetate spun where the acetate is left white. The mixtures are nearly all cotton with only 15 per cent acetate—just enough to give the appearance of wool when dyed. Other types of cotton and rayon mixtures are being used with a nubbed cotton which still contains specks and moats of the cotton fiber. These goods are boiled off and dyed in the reels after a desizing treatment. Very heavy cloths of 50 per cent cotton and 50 per cent rayon are also being printed.



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#### A.A.T.C.C. Completes Plans For Silver Jubilee Convention

PROGRESS in textile chemistry and processing during the last 25 years will be commemorated at the silver jubilee convention of the American Association of Textile Chemists and Colorists to be held Dec. 12-14 at the Hotel Statler, Boston. Highlights of the meeting will include a technical session on fundamental and applied research, the annual intersectional prize paper contest, an open meeting of the research committee, a dinner for charter and corporate members, and the annual banquet. Another feature of the convention will be exhibits portraying recent advances in textile processing. During the meeting a personnel service will be operated for the purpose of introducing members of the association to prospective employees. A group luncheon of textile school alumni will be held Saturday noon.

The convention will open on Thursday afternoon, Dec. 12, with meetings of research sub-committees. At the Friday morning session on fundamental research the following papers will be presented: "New Developments in the Chemical Modification of Wool," by Dr. Milton Harris, director, Milton Harris Associates, Washington, D. C.; "Some Aspects of the Biological Degradation of Cotton Textiles," by Dr. Ralph G. H. Siu, director, biological laboratories, Philadelphia Quartermaster Depot; and "Some Principles of the Structure of Synthetic Fibers," by Dr. Herman Mark, director, Institute of Polymer Research at the Polytechnic Institute of Brooklyn. At the Friday afternoon session on applied research the following subjects will be discussed: "Theory and Practice in Wool Dyeing," by F. L. Goodall, research staff, Geigy Color Co., Ltd., Bradford, England; "Factors Affecting the Use of Cotton in Plastic Laminates," by Dr. Simon Williams, associate director, Fabric Research Laboratories, Inc., Boston; and "Fundamental Principles Applied to the Elimination of Fire Hazards of Fabrics," by Dr. Sidney Coppick, research laboratories, American Viscose Corp., Marcus Hook, Pa.

At the dinner for charter and corporate members to be held on Thursday evening, there will be an award of the Olney Medal for outstanding achievement in the field of textile chemistry and an address by William D. Appel, president of the association.

Presentation of papers in the intersectional contest will take place on Friday evening. Following are the subjects of the papers to be presented by the various sections: "Tippy Dyeing of Wool and Its Control," New York Section; "The Effect of Dyestuffs on the Temperature Rise of Fabrics Exposed to Light," Philadelphia Section; "An Evaluation of the Kupensauer Process," Piedmont Section; "The Replacement of Starch in the Treatment of Textile Fibers and Fabrics," Rhode Island Section; "How the Mineral Content of Cotton Can Affect Beam Dyeing With Vat Colors," Southeastern Section; "Saponification Studies on Acetate Rayon," South Central Section; and "A Study in Detergency," Northern New England Section. The intersectional prize paper contest will be held on Friday evening. All sections of the association will compete in this contest, at which papers of outstanding importance to the textile industry will be presented. On Saturday morning the research committee will hold an open meeting, at which the association's research activities will be discussed. Scheduled for Saturday

afternoon is an inspection trip through the research laboratories of the Massachusetts Institute of Technology.

The principal speaker at the annual banquet to be held on Saturday evening will be Karl T. Compton, president of Massachusetts Institute of Technology.

The silver jubilee convention will be held under the auspices of the Northern New England Section. The executive committee in charge of arrangements is: general chairman—George O. Linberg, E. I. du Pont de Nemours & Co.; dining—Joseph A. Bryant, Jr., Bryant Chemical Corp.; exhibits—Delbert E. Ray, Massachusetts Mohair Plush Co.; finance—Philip S. Durfee, W. C. Durfee Co.; hotel—Harry M. Hartnett, General Dyestuff Corp.; printing, registration and personnel—Azel W. Mack, Dexter Chemical Corp.; publicity—Hyman P. Selya, Sagamore Color & Chemical Co.; reception—Edward S. Chapin, W. C. Durfee Co.; technical program — Walter J. Hamburger, Fabric Research Labs, Inc.

#### Lecture Series On High Polymers Announced

A series of lectures at the National Bureau of Standards, Washington, dealing with the chemistry and physics of high polymers has been announced by Dr. E. U. Condon, director of the bureau. The lectures, which continue the seminar presented last year, will be given by the nation's leading scientists in this field from industry and universities. High polymers is a new science concerned with the long-chain organic molecules which make up natural and synthetic rubbers, plastics, textiles, paper and leather.

The lectures, arranged by Dr. Robert Simha of the bureau's division of organic and fibrous materials, are open to the public without charge, and will be held from seven to nine o'clock in the evening in Room 214 of the Chemistry Building, National Bureau of Standards. The program consists of 12 lectures:

Nov. 22—"Theories of Fractional Precipitation of High Polymers as Applied to Cellulose Esters," D. R. Morey, Eastman Kodak Co.

Dec. 13—"Visco-Elastic Properties of Polymer Solutions," J. D. Ferry, University of Wisconsin.

Jan. 22—"On Quantum Mechanisms of a Macroscopic Scale," F. W. London, Duke University.

Jan. 30—"Applications of Magnetochemistry to Polymers and Polymerization," P. W. Selwood, Northwestern University.

Feb. 27—"Physical Chemistry of Collagen," J. H. Highberger, General Dyestuff Corp.

March 6—"Solution Properties of Cellulose Derivatives—Correlation with Physical Properties," H. M. Spurlin, Hercules Powder Co.

March 28—"Effects of Low Temperature on High Elasticity of Rubbers," S. D. Gehman, Goodyear Tire & Rubber Co.

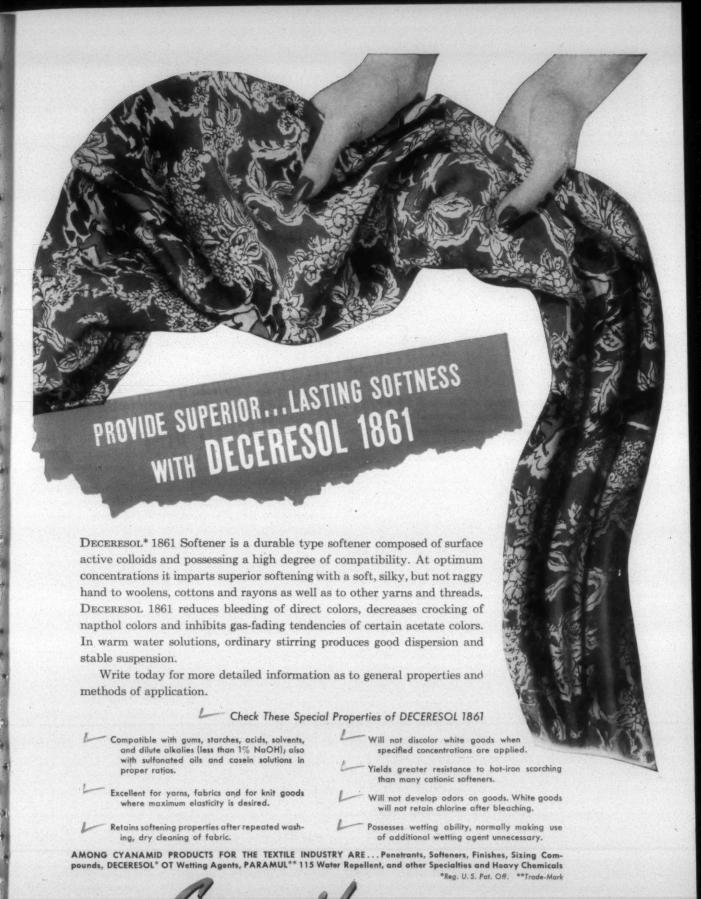
April 24—"Elasticity and Plasticity of High Polymers," H. Leaderman, Firestone Tire & Rubber Co.

May 8—"Electrical Properties of Polymers," R. M. Fuoss, Yale University.

May 29—"Polar Co-ordination in Solid Polymers," W. O. Baker, Bell Telephone Laboratories.

June 5—"Optical Investigations on Polymers," W. Heller, Wayne University.

June 12—"Discoloration of Polymers," R. F. Boyer, Dow Chemical Co.



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## textile bulletin

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#### Lewis vs. United States

As we go to press, the people of this country face one of the greatest problems in their history.

Many say that it is one of the basic principles of our government that a man cannot be forced to work. Yet for many years there have been vagrancy laws and many men who refused to work have been sent to jail.

Had the coal mine owners in the United States agreed that unless the price of soft coal was fixed at some figure, say \$15 per ton, every coal mine would be closed, which would mean that other industries would close and several million people be thrown out of employment, transportation of foods disrupted and the people left without adequate food or heat, it would not take long for the government to find a method of forcing the mine owners to resume the production of coal.

John L. Lewis, who contributed \$500,000 to the first New Deal campaign and since then has repeatedly been allowed to take this country by the throat and hike the pay of his followers with the resultant advance in the price of coal, has this time staged his demands at the beginning of winter and with the full knowledge that the cessation of the production of coal will cause suffering to many millions, disrupt transportation and by closing industries deny employment to people who have to depend upon wages for the necessities of life.

It is passing strange that 400,000 miners, who have received three advances of wages in the past three years and now receive excellent wages, were willing to leave their jobs with a full knowledge of the misery and suffering the disruption of coal mining would cause and that millions of other workers, many of them members of unions, would be denied the employment necessary to provide for their wives and little children.

As much as we may blame John L. Lewis, we should not forget that each and every miner who left his job in order to secure an addition to his already fat pay envelope, did so with full knowledge of the suffering which his action would bring to many millions.

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That attitude upon the part of 400,000 miners and their willingness to see distress and suffering come to their fellow citizens, is the really alarming part of the situation which confronts us.

It is fine to talk about freedom of action for all American citizens and about our government having no right to force a man to work but when we are face to face with a labor leader who is as ruthless as John L. Lewis and with miners who, although already well paid, are willing to walk off their jobs and cause distress and suffering, unless paid still more, it is time to forget the alleged rules of the past and consider only the stark realities of the situation.

When one group of citizens threatens many other citizens with cold and hunger, which can easily mean death for several million, it is time for something to be done even though it violates many of the accepted rules of our so-called freedom.

There is one point upon which John L. Lewis and his miners are vulnerable and that is their many million dollars of accumulated funds.

People who become ill and may die because of lack of fuel, through no fault of their own, should have the right to enter suit against the John L. Lewis organization and be compensated from its funds.

Workers who are denied their normal wages because the factories in which they work have closed because of the coal strike, should be compensated for loss of wages from the immense fund which John L. Lewis has accumulated.

Industries which suffer losses because they are forced to close should likewise be compensated from United Mine Workers funds.

The miners who have deliberately walked off their jobs, knowing the losses and suffering which their action will cause many of their fellow citizens, should have all of their old age, unemployment and social security rights cancelled and should be declared "outlaws" as far as future collective bargaining is concerned.

The present walk-out is no ordinary strike but is a strike against the government of the United States and in violation of a contract which was entered into when the government took over the mines.

Congress, the lame duck Congress, should be called into session at once and should enact whatever legislation is necessary to impound the funds of the United Mine Workers and make them available to those who suffer by reason of this unjustified and illegal walk-out.

The Congress should enact legislation which will deny future social security benefits to those who strike against the government.

It would mean little to put John L. Lewis in jail, but it would mean much to make the United Mine Workers treasury responsible for losses to individuals and industries through an effort to again take the people of this country by the throat and force acceptance of illegal and unreasonable demands.

#### Still Voting According to Color

C. I. O. elections are still running according to color, that is, Negroes for and whites against.

That is as it should be, because the C. I. O. is definitely committed to a Federal F. E. P. C. law which would force social equality between Negroes and whites upon the people of the South.

In tobacco plants, where most of the employees are Negroes and the C. I. O. organizers tell the Negroes that the C. I. O. is working to obtain social equality for them, the union wins elections.

The following are the results of some recent elections in tobacco plants where most of the employees are Negroes:

At the L. B. Jenkins Tobacco Co., Kinston, N. C
For the C. I. O
For the company 4
At the Dixie Leaf Tobacco Co., Kinston, N. C.—
For the C. I. O
For the A. F. of L
For the company
At the Imperial Tobacco Co., Kinston, N. C.—
For the C. I. O
For the A. F. of L 5
For the company 0
At the Whitehead & Anderson Co., Lumberton, N. C
For the C. I. O
For the company 0
The above elections must make it clear to anyone that the

The above elections must make it clear to anyone that the Negroes believe in voting for *THEIR* union and that they believe the organizers when they promise the enactment of a Federal F. E. P. C. which will force white girls to work with them and to share restaurants and rest rooms with Negro girls.

The C. I. O. recently has been running away from elections in textile mills, where white people predominate, and has had several elections cancelled where they knew they would lose.

They certainly slipped up when they took a chance on an election at the Green River Mills at Tuxedo, which is in the mountains of western North Carolina, for the result was—

The people in the mountains of North Carolina have the purest Anglo-Saxon blood of any in the United States and they have indicated that they will not join any organization which advocates social equality with Negroes.

At the Caswell Knitting Mills, Yanceyville, N. C., the

At James Lees & Sons Co. textile plant at Glasgow, Va., the vote was—

While it was not in the South, it is interesting to note that in an election held at the Kendall Mills at Turner's Falls, Mass., the vote was—

The A. F. of L., which is not much different from the C. I. O., took a bad licking Nov. 19 at the Champion Fibre



GEORGE BENJAMIN
FOURTH VICE-PRESIDENT
TOBACCO WORKERS INTERNATIONAL UNION

Recently placed in charge of organizing tobacco plant employees, including white employees, in North Carolina.

Just before the close of a recent football game in which N. C. State College defeated the University of Virginia 27 to 7, the stands began to chant "Poor Virginia, poor Virginia."

It is almost past the time to begin to chant "Poor C. I. O., poor C. I. O."

#### 65th Edition

We have been publishing Clark's Directory of Southern Textile Mills since July 1, 1911, but never in these 35 years, during many of which we published two editions each year, have we found the task so difficult as the 1946-47, or 65th, edition.

Not only have many mills changed ownership and officers and many others consolidated, but there have been a very large number of small textile plants, especially seamless knitting mills, established.

Several times we have sent representatives to towns to obtain the data on one new knitting mill and they would find two or three other plants about which there had been no publicity and of which we had had no previous knowledge.

We have always taken pride in the accuracy of Clark's Directory of Southern Textile Mills and have been forced to delay publication of the 1946-47 edition rather than fail to include as many as possible of the recently established plants.

We hope to be able to mail the new edition before the end of 1946.

ROCKY MOUNT, N. C.—Carolina Fabrics, Inc., has been established here, operating 50 box looms.

Spartanburg, S. C.—The bleachery of Startex Mills is being tripled in size and other reconversion and expansion is underway. The plant, which has shifted to 100 per cent cotton cloth production, has added several new products. Twenty new 64-inch looms are being installed for tablecloth goods production. Mead cloth for adhesive tape manufacture will be produced at the plant beginning in the near future. Another Startex product will be automobile upholstery fabric.

GAFFNEY, S. C.—Cherokee Finishing Co., which began operations several weeks ago, is producing several hundreds of yards daily of screen-printed textiles, employing one full shift of approximately 60 workers. The plant is located in the finishing plant building of the old Irene Mills, utilizing more than 32,000 feet of the building's floor space. Construction of a basement to provide an additional 10,000 feet of space is under way.

FRONT ROYAL, VA.—Steeping operations at the Front Royal plant of American Viscose Corp. ceased Nov. 12 due to a shortage of caustic soda. Shortages of caustic soda are attributed to after-effects of strikes which occurred in some caustic soda plants and to the drop in production of caustic resulting from overworking equipment without repairs during the war.

ALBANY, GA.—Clark Thread Co. of Georgia has begun the erection of a two-story finishing plant just across Flint River from the main business section of Albany. The plant is designed to bleach and dye cotton and woolen thread and package these products for the market. It also will handle the products of other mills, employing hundreds of workers. The new plant will comprise 250,000 square feet of floor space,

RICHMOND, VA.—Crawford Mfg. Co., manufacturer of automobile seat covers, will install machinery for the treatment and finishing of the cotton goods used by it instead of purchasing finished goods. H. E. Goforth, formerly of Dan River Mills, Inc., Danville, Va., recently became superintendent of the plant.

Wellford, S. C.—Anchor Fabrics Co. has established a small weaving mill here, operating 12 looms in the production of approximately 16,000 yards of upholstery fabrics per week. The operating partnership is comprised of J. Y. Higgins of Spartanburg, S. C., president; L. C. Finley of Wellford and John H. Wellons of Dunn, N. C. The company is capitalized at \$50,000.

ROCK HILL, S. C.—Celanese Corp. of America will build a \$39,000,000 plant here for the production of acetate yarn used in the manufacture of rayon fabrics. Approximately \$10,000,000 will be spent on construction and the balance for equipment. Construction will begin in the near future, with about 3,000 people to be employed immediately. When the plant is completed in 18 to 24 months, about 6,000 workers will be employed. When in full operation the plant will produce 1,000,000 pounds of acetate yarn a week.

GASTONIA, N. C.—Textiles, Inc., operating 13 combed yarn plants in this vicinity, has placed orders totaling \$1,500,000 for new equipment to be delivered to mills of this chain in the course of three years. During the past fiscal year, ending Oct. 1, the corporation expended \$675,000 for improvements. Sales of yarn for the past year by Textiles, Inc., reached an all-time peak of \$21,187,995 against \$17,986,375 for 1945, the report continued. Net manufacturing profits amounted to \$1,557,158, or an equivalent of \$2.58 per share on the common stock after provisions for preferred stock. This common stock per-share profit was further boosted to a total of \$3.73 by the sale of assets amounting to \$639,053.

CLAYTON, N. C.—Clayton Spinning Co., formerly Whitley Cotton Mills, has been organized here, with the main office in Gastonia, N. C. D. R. LaFar, Jr., of Gastonia is president and secretary of the firm; Harry T. Allen of Gastonia, vice-president and treasurer; D. S. Ball of Clayton, manager; and A. Sam White of Clayton, superintendent.

LAURENS, S. C.—Palmetto Textile Corp., a mill for spinning worsted yarn, will begin operations here within the next 30 days, employing approximately 40 persons in the production of about 10,000 pounds of yarn per week. The Laurens Bonded Warehouse building has been leased by the company and approximately \$15,000 has been spent for renovation and installation of machinery in the building, which measures 40 by 60 feet. Officers of the mill are R. Q. Hollingsworth of Atlanta, Ga., president; Ben Comer, Jr., of Atlanta, vice-president; and W. F. Davis of Union, S. C., manager-secretary and treasurer.

GREENWOOD, S. C.—The merger of Grendel Mills and Panola Mills Co. of Greenwood, Anderson (S. C.) Cotton Mills and Courtnay Mfg. Co. of Newry, S. C., under a new corporation has been approved by stockholders. The combined enterprise will be named Abney Mills and the capital will be increased from \$2,200,000 to \$5,000,000. The member plants operate a total of 158,496 spindles and 4,025 looms in the production of print cloths, rayons and cottons.

STONEVILLE, N. C.—A branch mill of Baxter, Kelly & Faust, Inc., Philadelphia, Pa., has been established here to manufacture pile fabric, operating 22 looms. John E. Baxter is president; Vance A. Coleman, superintendent; and H. M. Nelson, manager.

COLUMBUS, GA.—Swift Mfg. Co. will construct a \$40,000 addition to its mill here. Also, Georgia Webbing & Tape Co. will build a plant for the manufacture of webbing and tape here. The project will entail an expenditure of \$32,000.

ALBEMARLE, N. C.—The first annual banquet of Wiscasset Mills Co. 15, 25, 35 and 45-year service clubs was held recently with more than 800 in attendance. First award went to T. M. Denning, superintendent of the cotton mill who has just completed his 47th year with the company. Mrs. Daisy B. Smith, lone woman member of the 45-year club, was presented a gardenia corsage.

THE CASE OF ...

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WAVE

A new high standard of performance has been established by the new Cutler-Hammer Safety Switches. Here is a safety switch designed throughout to baffle any heat

wave generated by correctly selected fuses . . . .

And, here is a line of safety switches engineered to the last detail to provide better appearance, easier installation, greater convenience and safety. As a result, Cutler-Hammer Safety Switches are being featured by alert con-

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#### 80 YEARS

of service to the

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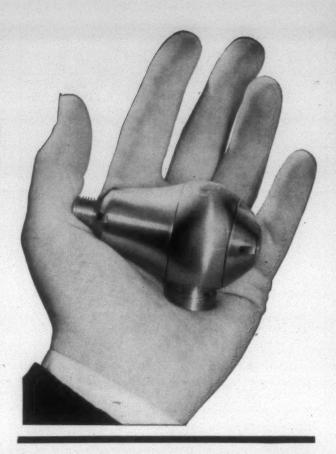
This long experience helped to give us the know-how in solving many wartime sizing, finishing and printing problems, and in meeting critical shortages by developing satisfactory substitutes.

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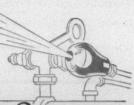
#### Parks Turbomatic Atomizer

AUTOMATIC - SELF CLEANING

IT "LEAKS" in just one place; leaks where it is supposed to; where atomizing is being done, where its vapor is being made. Can't and doesn't leak anywhere else.

Atomizers that leak in places not easily found; places one wouldn't be looking for, fritter away compressed air. They are expensive. The TURBOMATIC (the atomizer with the diaphragm) is efficient. Stays so.

No piping changes. The self-cleaning Turbomatic interchangeable with earlier and other models.



Parks-Cramer Company

Fitchburg, Mass. Boston, Mass. Charlotte. N. C.

Promotions, Resignations, Elections, Honors, Honors, Appointments, Civic Transfers, Appointments on Men in Uniform, Notes on Men in Activity and Associational Activity

#### PERSONAL NEWS

J. L. Wright is now superintendent of Plant No. 3 of Republic Cotton Mills at Great Falls, S. C.

Mr. and Mrs. Jesse M. Williams, the former now superintendent of Palmetto Yarn Mills, Inc., at Pageland, S. C., recently celebrated their 60th wedding anniversary. Mr. Williams has been associated with the Mauney interests at Kings Mountain, N. C., since 1889.

W. Wilson Aultman, formerly manufacturing superintendent at the Clover, S. C., plants of American Thread Co. and later technical superintendent of that firm's Dalton and Tallapoosa, Ga., plants, has resign ed to become superintendent of Newberry (S. C.) Textile Mills.

C. M. Black, superintendent of Borden Mfg. Co. at Goldsboro, N. C., has succeeded the late P. L. Borden as secretary and vice-president. W. A. J. Peacock has been named superintendent.

W. B. Shannon has been transferred from the superintendency of Highland Park Mfg. Co. Mill No. 2 at Charlotte to that of Mill No. 3 at Rock Hill, S. C. At Rock Hill he succeeds E. D. Newton, resigned.

D. M. Williams, formerly superintendent of the Adrian and Madora plants of American Yarn & Processing Co. at Mt. Holly, N. C., is now resident manager for Leading Embroidery Co. at Cowpens, S. C. L. A. Hamer has been appointed superintendent at the Cowpens plant.

J. Wilbert Wood has resigned as vicepresident and general manager of Textron Southern, Inc., at Anderson, S. C., and Charlotte, to become president and treasurer of Industrial Cotton Mills at Rock Hill, S. C. He succeeds L. D. Pitts, who has resigned but will continue to serve on Industrial's board of directors.

Burke M. McConnell, a vice-president of Burlington Mills Corp., has been appointed assistant general manager of the Greensboro, N. C., firm, not general manager as stated in recent news stories. . . Arthur T. Snyder has joined the Burlington offices in New York City as assistant director of apparel fabric development.

J. Clyde Harris has been transferred from carding second hand at the Pelzer, S. C., plant of Kendall Mills to overseer of carding at the Wateree Plant, Camden, S. C. . . H. D. Adams, recently returned from the armed services, is now overseer of spinning at the Wateree Plant.

Fred T. Lawson has been named plant manager for Cleveland Cloth Mills, Shelby, N. C., in a general realignment of duties. Aaron B. Quinn, vice-president and general manager, will transfer his residence to Greensboro, N. C., early in 1947 to assume more important duties with the J. P. Stevens & Co. organization. Howard Rollins has been named superintendent at Shelby, and James W. Corbett becomes office manager.



Claud M. Hendrix, left, has joined the sales engineering department of New York and New Jersey Lubricant Co. with headquarters at Atlanta, Ga. Mr. Hendrix has had more than 20 years' experience in the textile field, 15

years with Gossett Mills at Anderson, S. C., and five years with Calhoun Mills at Calhoun Falls, S. C., where he was assistant superintendent. Falls L. Thomason of Charlotte, Southern district manager for the company, states that further additions to the Non-Fluid Oil sales engineering staff can be expected soon in keeping with the firm's policy of offering conveniently located service facilities for the rapidly expanding Southern textile industry.

Miss Gwin Barnwell, the 1946 Maid of Cotton, was married in New York City this month to Robert I. Dalton, Jr., son of the Southern agent for Whitin Machine Works at Charlotte. Mrs. Dalton is the daughter of Mrs. Elmer Frank Andrews of New York City, former executive secretary of the Southern Combed Yarn Spinners Association, and the groom currently is associated with Whitin Machine Works.

Herman V. Gaertner, assistant treasurer for B. F. Goodrich Co., Akron, Ohio, has been elected controller of the company following the retirement of T. B. Tomkinson.

William C. Appleton, who resigned recently as president of American Viscose Corp., has been elected president of Selectronic Dispersions, Inc., a protective coating concern at Montclair, N. J.

Brackett Parsons, formerly assistant treasurer of Pepperell Mfg. Co., has been made a vice-president of the company.

Robert Amory, formerly president of Nashua Mfg. Co., has joined Crescent Corp. as manager of that organization's Boston, Mass., office. James C. Platt, Jr., has been appointed superintendent of the Dallas (Ga.) Mills Division of A. D. Julliard Co. His previous position, superintendent of the Aragon (Ga.) Mills Division, has been taken by Felton Mundy, formerly of the Floyd Mills Division at Rome, Ga.

John E. Ragan, manager of the St. Louis, Mo., district for the mechanical goods division of Goodyear Tire & Rubber Co. since 1935, has been transferred to Atlanta, Ga., as district mechanical goods sales manager. Philip C. Antoine becomes field representative at New Orleans, La., transferring from a similar position at Memphis, Tenn. Richard P. Goodenough succeeds Mr. Antoine as field representative at Memphis. Carl Baker, assigned to the Charlotte district office since 1944, becomes a field representative out of that office.

Rolf Wallin, a native of Sweden, has joined the staff of the Institute of Textile Technology, Charlottesville, Va., to work on engineering and design problems of textile machinery.

J. A. Boyce, son of J. C. Boyce, general superintendent of Clinton Cotton Mills and Lydia Cotton Mills at Clinton, S. C., has been made assistant superintendent of Lydia Cotton Mills.

J. Frank Wilson, production manager of the Marshall Field & Co. manufacturing division, Spray, N. C., will retire Dec. 31. His duties as production manager will be assumed by Harold W. Whitcomb, divisional vice-president and assistant general manager of the manufacturing division, in addition to his present responsibilities. E. G. Michaels, now staff assistant to Macon P. Miller, director of industrial and public relations, will be transferred to Mr. Whitcomb's office as staff assistant.

#### OBITUARY

William E. McKinney, 74, former superintendent of Arnall Mfg. Co. at Elberton, Ga., died recently at Atlanta, Ga. Surviving are four sons and four daughters.

A. C. Carpenter, 78, an official of Bemis Bro. Bag Co., died at his home in St. Louis, Mo., Nov. 9. He is survived by his widow.

Hubert D. Kernan, 64, pioneer in the rayon industry and only surviving founder of Skenandoa Rayon Corp., died Nov. 8 in New York City. At the time of his death he was an executive vice-president of the firm. His widow and seven children survive.

## **Houghton Wool Tops**

PROMPT SHIPMENT ALL GRADES ON SHORT NOTICE

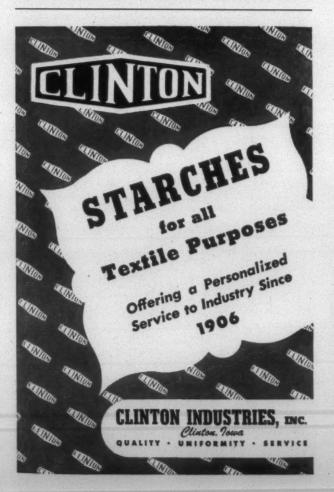
SUITABLE FOR BLENDS WITH RAYON OR COTTON

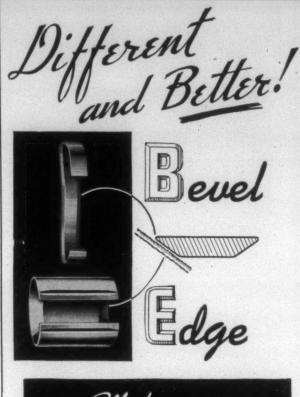
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- Less loading up of travelers on cotton.
   Less fly waste on woolen.
- 3. Minimizes split ends on rayon, and silk.
- Much lower end breakage—frequently 8 to 10 fewer per hour.
- 5. More uniform tension-more uniform yarn.

NOTE: Selection of the correct size and weight, in which our men assist, is extremely important to assure MAXIMUM results.

> U. S. Travelers are made and stocked in ALL styles.

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## For the Textile Industry's Use

#### EQUIPMENT - SUPPLIES - LITERATURE

#### Link-Belt Co. Announces New Type Power Unit

Link-Belt Co., 307 N. Michigan Avenue, Chicago 1, Ill., recently announced the development of a new type packaged power unit, known as Link-Belt Electrofluid Drive, which is presently available in horsepowers up to 20. The drive is a neat, compact, motorized hydraulic combination consisting of a general-purpose A. C. induction motor flange-mounted on a sturdy housing containing a hydraulic coupling also called fluid coupling. Uses for the Link-Belt Electrofluid Drive are said to be unlimited and are described in detail in a 16-page booklet, Book No. 2085, which will be supplied on request by any Link-Belt office.

#### Another Office Opened By Foremen's Institute

The National Foremen's Institute, Inc., of Deep River, Conn., recently opened a regional office in High Point, N. C., at 608 N. Main St., with James Westbrook in charge. Located in the center of a large textile producing area, the new regional office of the institute will offer a labor relations consulting service.

#### Dual-Purpose Electronic Heating Generator Offered

A recent development of Induction Heating Corp., New York City, is the Ther-Monic M-285C electronic heating generator, a single- dual-purpose unit said to be suitable for both induction (metal) and dielectric (non-metal) heating operations. Especially designed for use in experimental laboratories, testing depots and development research departments, the generator is provided with two separate, interchangeable oscillator sections, one for induction and the other for dielectric heating. Changing from one oscillator section to the other is said to be a simple job, accomplished by removing one oscillator section and replacing it with the other. The induction oscillator feeds into a radio-frequency output

transformer, while the dielectric oscillator feeds through coaxial cables to heating electrodes. The generator weighs 1,400 pounds, is 36 inches wide, 28 inches deep and 62½ inches high.

#### New Firm To Rebuild Tenter Frame Chains



L. C. Stowell, left, textile machinery specialist, formerly of providence, R. I., recently began operations in his new shop, L. C. Stowell Engineering Co., at Kannapolis, N. C. At present the new firm is concentrat-

ing on rebuilding tenter frame chains and employs from eight to ten men. Mr. Stowell said he hopes to render a great service to Southern textile mills, which in the past have had to send their tenter chains to Northern concerns to have them rebuilt.

Mr. Stowell expects to spend twothirds of his time traveling to the various textile centers, working with the operators of the mills. His modern shop is equipped to rebuild and manufacture tenter frame chains. Because of the scarcity of materials and the necessity of keeping present equipment in operation he will devote his full effort to rebuilding. Tenter frames are used in plants in which textiles are finished. There are thousands in operation in this area, he said. If the equipment is to operate efficiently it must be rebuilt every third year.

During the 22 years he has been in the textile machinery business, Mr. Stowell has invented and patented several improvements on tenter clips and guiders. In the war years while he was associated with the Edward Parkinson Mfg. Co. at Providence, R. I., he directed a large staff in the production of parts for gun mounts and radar equipment.

. A native of the Providence area, he was affiliated with the Textile Finish-

ing Machinery Co. for 15 years and for a long period was plant engineer. While with that concern he frequently visited Kannapolis and other Southern' textile centers.

#### Wickwire Spencer Sales Office Now At Buffalo

The Wickwire Spencer Steel Division of Colorado Fuel and Iron Corp. recently announced the transfer of its general sales manager's office from New York City to 361 Delaware Ave., Buffalo 2, N. Y., bringing the top sales and production department officials into one location. The advertising department of the concern was also moved to the Buffalo address as were the wire department general office and the market research department. The wire rope department was moved to the plant at Palmer, Mass. Hereafter the New York City sales office will be known as the Eastern district sales office, it was announced.

#### Russell Mfg. Co. Offers New Product Catalog

Russell Mfg. Co., Middletown, Conn., manufacturer of solid woven, rubber impregnated and special belts for the textile industry, offers a new 42-page catalog containing data and illustrations of the complete Rusco belting line. The catalog, produced in two colors, is available on request to the company's belting division.

#### Employees of Electrical Firm Acquire All Stock

Union Supply & Electric Co., Charlotte, announced last month through its president, Albert Wilkinson, that it had secured all outstanding stock of the company, making it completely employee-owned. Mr. Wilkinson advised that the sales policies of the company would remain unchanged but announced that the internal set-up of the organization would be revamped to streamline its activities for greater service to the electrical trade. The company was organized in May, 1945, with

## 

VIRGINIA
SODIUM HYDROSULFITE

Na2S2O4

VIRGINIA Hydrosulfite is a conscentrated, white, stable, free-flowing uniformly crystalline powder, readily soluble in water. 100 lbs. of water at 68° F. will dissolve 21.8 lbs. Na<sub>2</sub>S<sub>2</sub>O<sub>4</sub>. Easy and complete solubility, and carefully controlled particle size recommend VIRGINIA. "Hydro" as a preferred reducing agent for vat dyeing and stripping. Shipped in air-tight steel drums, 250 lbs. net weight.

Shipment will be made from West Norfolk, Va., in Carload and Less Carload lots; L. C. L. shipments from stocks in Boston Chicago, New York, Philadelphia, Charlotte and Atlanta.

"ESOTOO"

Liquid SO2

VIRGINIA "ESOTOO" is an ideal antichlor. Its popular adoption has followed the development of a practical semi-automatic method for regulating SO<sub>2</sub> concentrations in the sour box. Write for a complete description of the VIRGINIA method.

VIRGINIA "ESOTOO" is shipped in steel cylinders
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TEXTILE producers have found that statement much more than brave words!

Besides a 40-year-old close relationship with paper users in textile industries, we carry on ceaseless research to tie in HENLEY supply service with manufacturers' changing needs.

That is why all four HENLEY warehouse and sales divisions are geared up to a clear understanding of textile company requirements.

It is why we say so confidently, "It's HENLEY for PAPER." And as supplies continue to increase, the statement can be made even more sweepingly!

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Company

Charlotte, N. C. HIGH POINT, N. C. Gastonia, N. C.

Southern Paper Products Division, Asheville, N. C.

two employees in one small room. It now occupies more than 5,000 square feet of warehouse and office space and employs 24 persons. Company salesmen cover both Carolinas selling to the dealer and contractor trade general electrical supplies, fixtures, appliances and Neon supplies.

#### Staley Will Distribute Weaving Series Reprints

Art work depicting in vivid colors the development of weaving through the centuries will be reproduced by A. E. Staley Mfg. Co., Decatur, Ill., in a 25-inch by 39-inch lithograph, ready for use as a wall hanging. Decision to reprint the "History of Weaving" art work used by Staley's in a series of four-color advertisements during 1946 was reached when numerous requests for extra prints were received from textile mill executives and employees. The 12 drawings will be reproduced on fine offset stock from original art work, which is authentic in every detail. The four-color drawings depict the weavers of India, Egypt, Spain, China, France, West Indies, Mexico, Peru and North America. Three have colonial weavers as their subject, and illustrate the first cultivation of cotton, invention of the cotton gin and the first cotton gin in America. The pictorial display will carry an even more complete history of the art of weaving than was used as copy in the original advertisements. The wall hangings will be distributed free to persons requesting them from the Industrial Sales Department, A. E. Staley Mfg. Co., Decatur, Ill.

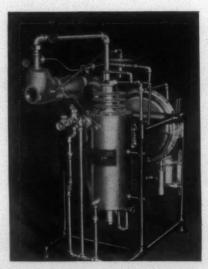
#### Fork-Type Truck Has Reach of 18 Feet

A new fork-type power industrial truck with an elevating reach of 18 feet above floor level has been announced by Elwell-Parker Electric Co., Cleveland, Ohio. Standard models heretofore have had a lifting range upto ten or 12 feet. New features of design and construction make the truck especially useful for high-tiering materials and merchandise. It is unusually compact, with increased speed and flexibility for maneuvering and lifting and lowering loads. The new truck picks up loads in the same manner as with standard models. Its capacity is rated at 4,000 pounds for lifting to a height of 11 feet, and 3,000 pounds to 18 feet. It is electrically driven, with

three separate motors, one for traveling, one for operating the elevating mechanism, and the third for tilting the upright columns. Body of the truck independent of the uprights and fork is only seven feet eights inches long. Overall width is three feet two inches, enabling it to maneuver in narrow aisles.

#### Vapofier Produces Gas From Fuel Oil Mixture

A new and improved Vapofier, a valuable and versatile item for the industrial plant, has been announced by Vapofier Corp., 10316 S. Throop Street, Chicago 43, Ill. Utilizing fuel oil, the Vapofier generates and supplies a vapor (vap-o-gas) which is then mixed with air and piped, burned and controlled in the same manner as utility gas, the company reports. The Vapofier (as shown) is said to be ideal for industrial heat processing, as standby equipment in case of gas failure or shut-off and as a pre-mixer for natural or manufactured gas.



The operation is simple—fuel oil is maintained at a constant level in the combustion chamber by a float valve. The products of combusion are drawn through the surface of the oil in the combustion chamber, heating the oil to vaporizing temperature. The vapor thus created is drawn off through the pre-mixer where proper fuel-air ratio is established and maintained. The combustible mixture is then piped to the burners. Fuel-air ration may be predetermined and maintained throughout the entire range of capacity and flame quality may be varied from oxidizing to reducing. Eight standard sizes are built and larger sizes will be built on special order to meet requirements, it was announced. Further details on the Vapofier will be supplied on written request to the company.

#### Improved Tire Fabric Matting Is Developed

Announcement has been made of the production of Tuf-Tred, a superior grade of tire fabric matting, by American Mat Corp., 1789 Adams Street, Toledo 2, Ohio. This matting is constructed of corrugated tire fabric links, strongly laced in galvanized rust-resisting steel wires. No metal is exposed to cause a cutting or tripping hazard. The mat has long wearing qualities, is economical, a good dirt remover, prevents slipping, affords comfort, and is quiet and resilient in use. It is approximately 5/8-inch thick, comes in widths up to six feet and in any length, and weighs approximately 21/2 pounds per square foot.

#### Tough Floor Problems Covered In Booklet

Tough Floor Problems is the title of a new folder published by Stonhard Co., 403 N. Broad St., Philadelphia 8, Pa., dealing with the repair and construction of floors that are subject to acids, greases, oils and severe abrasion. The booklet illustrates methods for preventing the disintegration of concrete where these difficult conditions prevail and also discusses the patching of spalled concrete, the pointing and resetting of brick or masonry and the repair and construction of foundation and retaining walls. A free copy of this folder will be supplied on written request.

#### New Food Service Cart Offered By Mealpack

A new canteen food service cart, the Mealpack mobile canteen, Model 83, was introduced recently by Mealpack Corp. of America, New York City. This cart is said to provide for compact storage and quick dispensing of individual hot meals for office and plant workers in industry. Readily loaded and replenished with packed containers via the Mealpack level-loading system, the cart is quiet and easy to handle. When fully provisioned each canteen serves 250 to 300 people.

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#### Melamine Resin Compound Described in Bulletin

A basic melamine resin, Aerotex Resin M-3, which imparts a wide range of characteristics to all sorts of fabrics, is described in a new bulletin of the American Cyanamid Co. textile resin department. Used in different formulas with other compounds, Aerotex Resin M-3 controls shrinkage and gives crease resistance to rayons, linens and cottons or mixtures of these, and effects durable glazing on chintz. Aerotex Resin M-3 is also used in formulas to bind pigments, for gas fading resistance to acetate rayons, fixation of starches and gum, reduction of slippage, and durable stiffness particularly in cotton buckrams and interlinings.

Thermosetting resin Aerotex M-3 is considered superior to the urea formal-dehyde type formerly used because of many improved properties. Particularly important among these is the ability of Aerotex Resin M-3 to maintain its stability under storage conditions. The bulletin gives the formulas in which resin is used and discusses technical

problems connected with its use. Bulletin 109, Aerotex Resin M-3, may be secured by application to Textile Resin Department, American Cyanamid Co., Bound Brook, N. J.

#### Industrial Alarm System Signals Processing Dangers

A new signalling assembly and system which will sound an alarm when pre-determined industrial processing temperatures, levels or pressures are reached, has been developed by Brown Instrument Co., Philadelphia, Pa. "The new assembly will warn," according to L. Morton Morley, vice-president and general sales manager of the Brown Division of Minneapolis - Honeywell Regulator Co., "of excessive flow, pressure, temperature or other factors which are ordinarily subject to manual control and human error. The new assembly extends the principle of alarm signalling controls to a wide variety of processes. The assembly, contained in an explosion-proof housing, is adapted to inherently dangerous processing, especially in the manufacture or use of

highly explosive chemicals or elements." To be marketed by the Brown company under the name of the Air-O-Larm, the new assembly is capable of providing either audible or visual warnings of undesirable or dangerous conditions. It will be made available immediately.

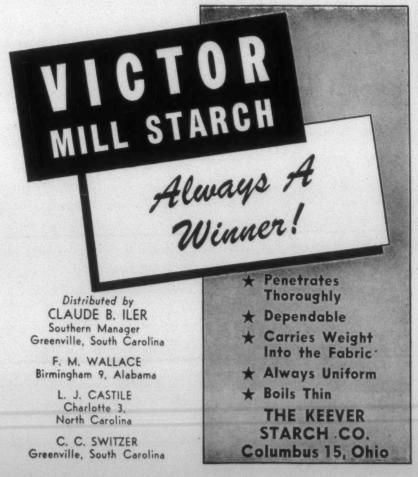
#### New Type Floor Machine Introduced by Tennant

An extra-low disc-type fioor machine of new design, for polishing, scrubbing, steel wooling and other maintenance, has been introduced by G. H. Tennant Co., Minneapolis, Minn., manufacturer of floor equipment.



Unique feature of the machine, as shown, is a special side-polishing brush which cleans and polishes flush with the walls, even polishing the base-board. The brush, which has bristles extending beyond the circumference of the disc and approximately two inches high, eliminates bumping and scratching furniture. It also permits fast, easy operation under crowded conditions.

Sturdily built for use on all types of floors, the machine accommodates 15-inch accessories for dry cleaning and burnishing with steel wool, for polishing and scrubbing, and for rug cleaning. A steel tank on the machine handle holds water and soap solution for scrubbing. The liquid feeds to the center of the brush at the flick of a lever and flows uniformly through the bristles. Illustrated Bulletin 81.9 and further details about the construction and operation of the new machine (Model 15) may be obtained from



G. H. Tennant Co., 2530 North Second Street, Minneapolis 11, Minn.

#### U. S. Rubber Offers New Textile Finishing Agents

Two textile finishing agents that will give longer life and lasting beauty to clothes were introduced recently to representatives of the textile industry by Naugatuck Chemical Division of United States Rubber Co. One, a permanent starch for dress goods and curtains, the other an improved shrink preventive for woolens, the materials were shown at the 17th annual meeting of the Textile Research Institute. Both are milk-like liquids derived from petroleum and coal tar products. A single dipping in these solutions applies enough of the materials to tame the textile

In the case of the permanent starch, called Kandar, the treatment gives cloth a lasting crispness, or starchiness. As a result, women's dresses, curtains, draperies, and other articles made from fabrics so treated can undergo repeated laundering or dry cleaning without be-

coming noticeably dulled or wilted.

In addition, Kandar increases the strength of cloth five to ten per cent, depending on the amount used. The average cost is only half a cent per yard treated. The agent produces its starching effect by bonding fibers to fibers and yarns to yarns; it was explained. However, if desired, the yarn-to-yarn bonds may be broken down to give the cloth greater softness by passing it between highly polished rolls.

The other textile agent, named Koloc, reduces the shrinkage of wool from the range of 30 to 40 per cent to as little as two or three per cent. It will be used to treat wool such articles as hose, sweaters, blankets, children's clothing, sportswear, and women's skirts. The company belives this is the first anti-shrink process that actually increases wool strength. Independent tests have shown Koloc treated fabrics to be approximately ten per cent stronger than untreated fabrics. Also, up to 50 per cent greater abrasion resistance is obtained, promising longer wearing garments.

Kandar and Koloc both have the

advantage that they do not require a curing step to set them in their permanent form. After cloth is dipped in milk-like Kandar, it passes between squeeze rolls to remove the excess liquid and is dried in an oven at 250° F. in one-half minute to three minutes.

Koloc is applied in similar manner, except that it is dried at a lower temperature and need not be dried immediately. The agents are invisible and are insoluble in laundering or dry cleaning solutions. They also protect the fabric against the acidic action of chlorine from bleaching solutions.

#### Durant Offers Catalog On Textile Counters

Durant Mfg. Co., 1929 N. Buffum Street, Milwaukee, Wis., has just released its new Textile Catalog No. 50 describing the firm's new pick counter models and other standard Productimeters that are widely used by the textile industry. The catalog is fully illustrated and contains detailed information concerning the variety of textile counters produced by Durant.



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#### Foxboro Co. Issues New Control Valve Bulletin

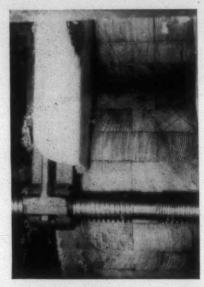
Pneumatic Control Valves and Controller Accessories is the title of Bulletin 277-1, a new 36-page publication of Foxboro (Mass.) Co., maker of industrial instruments and equipment for measurement control. The company's previous valve bulletin has been completely revised and much new material has been added, to give the present bulletin maximum convenience and usefulness. Among its features are a color page showing the various identifying enamel finishes offered on Stabilflo valves, corresponding with the color code of the American Standards Association; plates and tables of specifications for control valves, needle type valves, poppet valves and butterfly valves; separate sections on the Vernier Valvactor for high-accuracy positioning of valve plungers, and on air switches and sub-panels for remote valve control. An appendix contains information on computing valve sizes, with tables and formulas for determining the size of the correct valve for a contemplated installation. Air filter sets, ventilating dampers, and other pertinent accessory equipment is illustrated and described on other pages. Copies of Bulletin 277-1 will be mailed on request.

#### Gum Finish for Fabrics Developed By Dexter

The textile chemical division of the Dexter Chemical Corp. announces the development of Dexene No. 115, a new product designed to give a firm finish to cottons and rayons. Dexene No. 115 is a water soluble gum finish of low viscosity and high stability. It is readily soluble in cold water, works well with starches and may be added to many starch finishes to improve the binding power of the starch. It may be mixed with both cationic and anionic materials and is unaffected by mild conditions of acid or alkali. Dexene is also an efficient aid in the printing of cotton and rayon.

#### 14-Month Test Given To Resin Treated Lags

Riggs & Lombard, Inc., Lowell, Mass., textile wet finishing and drying equipment manufacturer, has recently experienced what are described as splendid results after testing its newresin lags for more than 14 months on a No. 65 fulling mill at Somersville (Conn.) Mfg. Co. Recently developed by Riggs & Lombard, the resin lag, as the name implies, is a wooden lag treated with resin. This process makes possible the use of softer, cheaper, more plentiful woods which have a better grip than hard woods, a much better grip than rubber, and are impervious to soap, alkali and tar removers.



The lags illustrated ni the accompanying cut have been in continuous two and three-shift operation for 14 months at Somersville. A good portion of this work was on heavy O. D. goods for the Army. The rolls show practically no wear at all, and curvative or bowing out is practically negligible. This remarkable demonstration justifies Riggs & Lombard's prediction that resin lags will last four or five years before renewal or repair is necessary. It is pointed out that this new product saves not only on direct roll cost because of its long life, but that it also greatly reduces the number of times which rolls have to be removed and replaced. The expense incidental to these latter operations is much more than the turning down cost in a repair operation.

#### Marking Chalk Developed By Uxbridge Worsted Co.

After several years of laboratory research and tests in actual use, Uxbridge Worsted Co. has developed and patented a new type marking chalk that will not set when wet by water, steam, or chemicals. It will easily washout in warm water bath, bleaching, cold scours or synthetic scours. In fact,

in most cases it will wash out in cold water, thus eliminating the problem of colors setting in the crabbing and fulling process. Another advantage is that it will not glaze over and become hard to use, and always maintains its easy marking qualities. This chalk is now being manufactured by Uxbridge in nine distinctive colors for sale to the textile industry, under the trade name, Easy-Rid textile chalk. Matthews Equipment Co. of Providence, R. I., is the sole distributor. The Southern agent is Meadows Mfg. Co. of Atlanta, Ga.

#### Metallizing Handbook Contains Much Data

The latest and most complete collection of technical and operating data on the Metallizing process is contained in the fourth edition of the Metco Metallizing Handbook, published by Metallizing Engineering Co., Inc., Long Island City 1, N. Y. In addition to up-to-the-minute data on preparation of surfaces, metallizing technique and finishing procedure, complete data on corrosion resistance, specific gravity, hardness, bond strength, tensile strength and relative shrink are contained in many interesting chapters. Profusely illustrated with pictures, drawings, diagrams, charts and graphs, this 86-page, pocket size handbook presents practical and technical aspects of the Metallizing process in complete

#### Monsanto To Enlarge Illinois Plant Facilities

Monsanto Chemical Co. announced recently that it has received government approval for an estimated \$4,000,000 expansion of its Monsanto, Ill., plant facilities in a program which will probably involve an eventual 200 new employees.

The program, the company said, involves five separate projects, among them enlargement of chlorine and laboratory facilities and new facilities for the production of miscellaneous chemicals. The projects, Monsanto said, would involve a cost of about \$3,500,000 for new chemical machinery and about \$500,000 building expenses. Approximately \$1,023,000 will be paid labor for the installation of the chemical equipment and \$125,000 will be paid labor on the expansion construction.

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WANTED—By man with 30 years' experience as overseer of carding and spinning and superintendent—to contact mill'in need of a progressive superintendent. Write "Spinning," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

POSITION WANTED as dietitian or assistant dietitian in large textile cafeteria. Graduate of Lewis Hotel Training School, Two and a half years' practical experience in large hotel. Will no anywhere. For interview write "Dietitian," care Textille Bulletin, P. O. Box 1225, Charlotte 1, N. C.

WANTED—Position as Spinning Overseer. 15 years' experience in spinning on white and colored work; five years' experience as Shift Foreman on numbers from 3/1 to 30/1; also experienced on ply yarns, both plain and fancy twists; on Whitin long draft and Saco-Lowell long draft, latest type. Married; 36 years old; high school graduate: sober and can furnish best of references. Now employed but desire to make change, Write "AE," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

WANTED—To contact the management of some yarn plant which is in need of a superintendent. 18 years' practical experience as general overseer of carding and spinning; three years as assistant and night superintendent. Single and ply yarns. Straight and blend mixes. Age 37, married, Protestant, sober. Desire to make change first of the year. Will consider assistant superintendent's position of a print cloth mill. Prefer South Carolina or Georgia location. Write "Print Cloth," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

POSITION WANTED as second hand in card room. Experienced card grinder, overhauler and fixer. Prefer mill with available four-room house. Family. Best of references, Address "Card Grinder." care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

WOULD LIKE TO HAVE JOB as assistant overseer or second hand of Spinning Department. Have from 15 to 20 years' experience in this department. Am also graduate of I. C. S. in Textile Cotton Spinning. Age 40, married, sober, and can go anywhere that offers a job on regular or long draft spinning. Write "XYZ," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

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Two men to overhaul spinning and card room machinery at \$1.371/2 per hour.

Reply "Overhauling," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

WANTED-Overseer of Carding and Spinning for 9,000-spindle mill on coarse colored yarns located in North Carolina. Give past experience and references in first letter. Excellent opportunity for ambitious person. Write "WLG," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

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Write "M-T," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

## Index to Advertisers

Pr	ige .	
Acme Steel Co	21	Keever Starch
Aluminum Co. of America	26	Keystone Beltin Kimmel Machin
American Cyanamid Co. (Industrial Chemical Div.)	40	Lambeth Rope
American Companied Co (Taytile Perin Dant ).	22	Landis. Oliver
American Paper Tube Co.	99	Laurel Soap M
American Textile Sheet Metal Works	91	Lawrence Leath
American Viscose Co.	31	Luttrell & Co.,
American Paper Tube Co. American Textile Sheet Metal Works American Textile Sheet Metal Works American Viscose Co. Armstrong Cork Co. Armstrong Cork Co. Ashworth Bros.	86	Maguire & Co.,
Ashworth Bros.	77	Marquette Met
Baily & Co., Inc., Joshua L.	00	Merrow Machin Moreland Chem
Barber-Colmon Co	4	Mount Hope M
Barnes Textile Associates	91	Mountain City
Becco Sales Co.	10	National Ring
Bally & Co., Inc., Joshua L. Barker-Colman Co. Barnes Textile Associates Becco Sales Co. Best & Co., Edward H. Blackman-Uhler Co., Inc. Borne, Scrymser Co. Brooklyn Perfex Corp. Brown Co., The David Burkart-Schier Chemical Co. 84 and Burklart-Schier Engineering Co. (Graham Chem. Co.)	80	Neisler Mills
Blackman-Unier Co., Inc.	43	Onyx Oil & Ch
Brooklyn Perfex Corp	64	Pabst Sales Co
Brown Co., The David	76	Page Belting C
Burkart-Schier Chemical Co 84 and	89	Parks-Cramer
Burlington Engineering Co. (Graham Chem. Co.)	93	
Butterworth & Sons Co., H. W.	47	Penick & Ford
Butterworth & Sons Co., H. W. Carolina Industrial Films Carolina Refractories Co.	93	Piedmont Proce
Carolina Refractories Co.	93	Railway Supply
Carter Traveler Co. (Div. of A. B. Carter, Inc.) Clinton Industries, Inc.		Ray Chemical Raybestos-Man
Clinton Industries, Inc. Cloverleaf Mfg. Co. Cole Mfg. Co., R. D. Corn Products Refining Co. Crempton & Rnowles Loom Works Curran & Barry  D & M Plating Co. Dary Ring Traveler Co. Dayton Rubber Mfg. Co. Dectison Mfg. Co. Dodenhoff Co., W. D. Draper Corporation Dunning & Boschert Press Co. Du Pont de Nemours & Co., E. I. (Dyestuff Division)	85	· Plant)
Cole Mfg. Co., R. D.	74	Raymond Serv
Corn Products Refining Co.	20	Rice Dobby Ch
Crempton & Knowles Loom Works	18	Rohm & Haas
Curran & Barry	88	Seco-Lowell S
D & M Plating Co.	95	Santt Testers
Dary Ring Traveler Co.	3	Sevdel-Woolley
Derison Mfg. Co.	95	Sinclair Refini
Dodenhoff Co., W. D.	14	Sirrine & Co.,
Draper Corporation	7	Solvay Sales C
Dunning & Boschert Press Co.	.91	Southern Spin
Division)	13	Standard Bran
Poton Doul B	24	Steel Heddle M
Engineering Sales Co.	61	Stein, Hall &
Eaton, Paul B. Engineering Sales Co. Foster Machine Co.	08	Sterling Ring
Gastonia Roller, Flyer & Spindle Co.	06	Stevens & Co.
Gossett Machine Works	83	Terrell Co., T
Greenville Belting Co.	64	Textile Service
Gossett Machine Works Greenville Belting Co.  H & B American Machine Co. 22 and	23	Tide Water As
Hanks, W. E.	95	U. S. Ring Tr
Hart Products Corp.	. 5	Union Supply
Henley Paper Co.	57	Universal Win
Houghton & Co. F. F.	62	Victor Ring T
Houghton Wool Co., The	55	Virginia Smeli
Hanks, W. E. Hart Products Corp. Henley Paper Co. Hetherington & Sons, Inc., John Houghton & Co., E. F. Houghton Wool Co., The Howard Bros. Mfg. Co.	37	Vogel Co., Jos
Industrial, Cooling & Moistening Co. Iselin-Jefferson Co. Johnson Chemical Co.	91	Wallerstein Co
Iselin-Jefferson Co.	76	Wheeler Reflect Whitinsville S
Johnson Chemical Co.	93	Wolf & Co., Ja
	100	

21		
	Keever Starch Co. Keystone Belting Co.	60
26	Keystone Belting Co.	86
	Kimmel Machinery Co., Leon	64
49	Lambeth Rope Corp.	78
33	Million or Angle Cosp.	85
99	Landis, Oliver D.	
91	Laurel Soap Mfg. Co., Inc.	0.0
	Lawrence Leather Co., A. C.	
31	Luttrell & Co., C. E.	64
nd 9	Maguire & Co., Inc., John P.	59
66	Marquette Metal Products Co.	19
77	Merrow Machine Co., The	93
88	Moreland Chemical Co., Inc.	84
4	Morrisha Chemical Co., Inc.	70
	Mount Hope Machinery Co. Mountain City Foundry	120
91	Mountain City Foundry	30
10	National Ring Traveler Co.	86
80	Neisler Mills	88
43		29
75	Onyx Oil & Chemical Co.	140. G. P. (100)
64	Pabst Sales Co.	71
- 76	Page Belting Co.	82
nd 89	Parks-Cramer Co.	53
.) 93		
47	Peach & Co., D. W. Penick & Ford, Ltd., Inc.	78
	Piedmont Processing Co.	88
93		
93	Railway Supply & Mfg. Co., The Fron	t Cover
.) 81	Ray Chemical Co.	72
55	Raybestos-Manhattan, Inc. (North Charleste	on
85		84
74	Raymond Service, Inc., Chas. P.	
20	Rice Dobby Chain Co.	72
18	Rohm & Hogs Co	
	Rohm & Haas Co. Roy & Son Co., B. S.	0.7
88	Roy & Son Co., B. S.	33
95	Saco-Lowell Shops	
84	Scott Testers, Inc.	73
3	Seydel-Woolley & Co.	55
95	Seydel-Woolley & Co. Sinclair Refining Co.	24
14	Sirrine & Co., J. E.	86
7	Solvay Sales Corp.	87
	Southern Spindle & Flyer Co.	0.1
91	Southern Standard Mill Supply Co.	91
13	Standard Brands, Inc.	
		45
34	Steel Heddle Mfg. Co.	5
34	Stein, Hall & Co.	
61	Stein, Hall & Co Sterling Ring Traveler Co.	53
	Stein, Hall & Co Sterling Ring Traveler Co.	53
61 98	Stein, Hall & Co. Sterling Ring Traveler Co. Stevens & Co., Inc., J. P.	51 81
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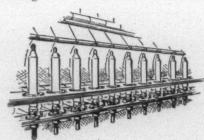
(Continued from Page 43) first question is: "Do you like the sliver-lap preparation for drawing? Why?" Will someone tell us about that?

Mr. HORNER: We use the sliver-lap preparation for drawing-16 ends up on the lap; it winds around into a lap. We like the system very much, because it eliminates the cans that we used to have to place behind the drawing and saves a lot of floor space. It takes less time to handle it from the sliver-lap machine than to put it in the cans at the drawing and take it back out. This question is, why do you like it? There are some disadvantages that I might bring out. One disadvantage is that there is a slight draft there that you would not get from the can behind the drawing. The reason is that the drawing runs so slowly that it does not jerk it out of the can and stretch it. The sliver-lap machine is a rather fast machine, and if you are not careful you will run that machine too fast and stretch the sliver. The machine also has a draft—a very small amount. But through actual test a short while ago I found that it had three or four times that much draft. It is supposed to have 1.03 draft.

MR. McDowell: What has always puzzled me about that type of drawing is what they do about the tension. You have a wider space in coming through your roving, which makes your selvages have a longer pull than on the conventional type. Do you have any trouble about the selvages? Do you have a ragged selvage, as compared with the other?

MR. HORNER: I don't think you would have any more ragged selvages on the sliver-lap than in drawing out of a can. You wrap that on a spool or disc, which has a tendency to double up those selvages; but in the sliver-lap machine you have selvage control. We have not noticed any difficulty on our work because of the selvage feeding out of the sliver-lap machine.

MR. LowE: There are over 9,000 deliveries of the controlled draft drawing in mills in this country, most of those replacing two-process four-roll drawing, which would mean replacing at least 20,000 deliveries of four-roll drawing. So it is nothing new, and it has been widely accepted as a good type of drawing.



Now, going back to Mr. Horner's remark in regard to draft in the lap winder, you know unevenness in slivers is caused by running slivers through rolls at high speeds and drafting through those rolls. I am speaking now of the new sliver lap machine, of which a new model was made in 1937. The new model has no draft in it whatsoever. Sixteen ends of card sliver are placed back of this tube and the ends placed through and wound through a tension draft, which is .104. That is practically no draft at all, but just tension. The stop motion is in the back. The lap is controlled also to this extent, that it is measured. When that lap runs out the laps are taken from the lap winder and put

on the controlled draft drawing frame. Those laps being made on the lap winders are measured, so there is approximately the same number of yards in each lap, and that number of yards fills the can. Therefore when you put on your laps and they run out you have a full can of sliver in front. The main advantage of that is that the lap cannot break back, and you have full cans of drawing sliver to deliver to your next process of slubbing-sliver that has not been pieced. What makes for unevenness in drawing sliver is the stopping and starting of the drawing rolls. Regardless of how good your gearing is, a stop and start of the rolls is going to make a little thin place in that web. Maybe it is not perceptible to the eye, but it is there. With that system of drawing you can deliver an evener sliver. I am taking for granted that the rolls are the same on a four-roll drawing or five-roll drawing. By the way, this system is called fourroll drawing or five-roll drawing or controlled draft drawing. We prefer to call it the controlled draft drawing.

Mr. McDowell raised a question about the selvages. There are only two disadvantages or only two reasons advanced that I know of why there would be disadvantages to this type of drawing. Most mills running two processes of drawing have six ends on the breaker and six ends on the finisher. That gives a doubling of 36. Controlled draft has only 16. If there is any advantage in doublings, then the disadvantage of this system would be that you have only 16 doublings versus 36 on two-process four-roll drawing. Now, I might mention that some quality mills and some mills that do a lot of blending are running a combination drawing; that is, a combination of four-roll drawing and five-roll drawing, which gives you 96 doublings—six times the 16, which gives you a very uniform sliver. If there is any advantage in doubling you can really get it there.

You say that adds an extra process. That is true; it adds an extra process in your mill. But your cost of operation in drawing, where you handle big packages, is approximately one-fifth of a cent a pound. So if there is any advantage in doubling, the drawing process is the logical place to do a lot of doubling, because you can do it very cheaply. So one disadvantage is the lack of doubling. The other disadvantage, of which Mr. McDowell spoke, is that the lap is of nine-inch width, and therefore the selvages are approximately nine inches wide on the boss on the front top rollerapproximately or almost that wide. Then that is drawn down to the trumpet. We know, of course, that the shortest distance between two points is a straight line. Those angled lines have a little longer to travel. On controlled draft drawing I have not seen anywhere any broken selvages. We find two to three per cent less variation on sliver with the controlled draft drawing. In order to test that we have done this. If those selvages have to travel faster than the middle of that sliver, of course the middle of that web goes back some, because it cannot keep up. We have placed a ribbon on those selvages and run it through, and there is not enough tension on it to break it. We have also found out that what actually happens is that the slivers on the selvage do increase in speed and that some of those particular filaments will pass the other filaments. But that displacement does not amount to anything in the variation inch-to-inch of

In addition to the advantage of having no piecing, there is a large saving in cans. We do not sell the controlled draft drawing as an item that will save you manufacturing costs. In large installations there will be some small saving

in labor cost. There is not much saving in floor space, because you have the lap winder. But there is a big saving in cans. For instance, 16 deliveries of controlled draft drawing will require only 32 cans—one can for each delivery of drawing and 16 cans at the lapper. Those 16 cans of controlled draft drawing will replace approximately 40 deliveries. It will be 32 cans versus 280, and of course cans are not cheap. That is an advantage. There is another advantage which I should like to mention. In large installations, where mills have several hundreds of cards, we find it is very much easier to convey laps than it is to push cans. We have laid this out in several mills where we take 50 cards, say, and then put in two or three lap winders, then 50 more cards and two or three lap winders, and so on, saving those card hands from having to push cans from a card way back here to a drawing frame way up yonder. In other words, it is possible to make your layout so that the cans will go up to the lap winder, and you wind the laps, put those on trucks, and push the lap trucks up to the drawing. It lends itself to a very nice layout, and conveying is a very costly thing in a mill.

MR. HORNER: What do you consider a maximum speed for the front roll in drawing?

MR. Lowe: Of course, that is a question. With the sliver tester we have found out that those inch-by-inch variations are what you are trying to eliminate—not so much from yard-to-yard but from inch-to-inch. We found that drawing is delivered at 80 feet a minute, 90, 100, 110, and on up. We found that from approximately 80 feet a minute on up to 110 approximately there is no difference in the percentage of variation in the sliver. After 110 feet we found the variation did increase. We like to keep it to 110 feet a minute

MR. HORNER: How about the sliver-lap machine?

MR. Lowe: That has a motor sprocket, and we do not like to see a sprocket put on of more than 33 teeth. I failed to mention, on the controlled draft drawing, that in the saving of cans, not having to creel the cans, you can operate your drawing at from 90 to 92 per cent efficiency. The Cannon Mills have all that type of drawing, and they tell us they get about 92 per cent efficiency on their drawing because they do not have to keep the machines standing to creel the cans.

MR. A.: What do you find as to the variation in the sliver from the time the lap leaves your spool—what we call the tail end of the lap? Do you run that through your drawing? What do you do with that? What would be your variation?

MR. LOWE: Mills creel it both ways. Some have the full-can stop motion in front so arranged that it will stop off when possibly you would have that much (indicating) left on your lap or the tail of your lap. Or you may still, on some of those laps, have a little bit wound around the roll. Where that is the case they usually hold that lever on by hand and let that run through and then tear the top of that can off. That will be the waste. There are other mills that work it differently, and I do not know that I can say which is the best system. In that they run that end up to probably 12 inches from the back roller, then piece in the other lap and run that through, and then tear it off.

MR. A.: It depends upon the operator of the machine to take that off in front if you let it go through, and I have found that sometimes he takes off enough and sometimes he doesn't. We have tried to work something so that when it goes through the spool it will automatically knock off;

but we have found that makes a tremendous lot of waste, although it eliminates the variation. We also find we have a draft between the back roller and the spool roll, so when it leaves the spool it feeds faster into your feed roller, and you have a heavy sliver. We doubled up, as you said, and tried that. But then if they do not pull it off you do have something—you have twice as much weight.

MR. LowE: Personally, I think the best method of doing that is to run that tail end right up close to the back roller, then lay your new lap in and run it through. Then that will be on top of your full can, and you can tear that waste off.

MR. A.: What we run into is that they do not all run out at the same time. Sometimes there is about a yard and a half difference. We put it in in 1935, I think. If something could be worked out so they will all run out at one time then we could tear it off and eliminate that. Sometimes it upsets your cork roll, or whatever roll you are running, because it goes through there in a lump. If we could get away from that it would help us a lot.

Mr. LANIER: About what percentage of waste should we make on drawing?

MR. LOWE: With a controlled draft drawing organization we allow 0.5 per cent, I think that controlled draft should run 0.25 per cent.

MR. LANIER: One-quarter of one per cent. Mr. Byrd made a statement I should like you to clear up. He said it ran over a long draft between the supply rollers and the top rollers after it left the spool. We found out something after the first two years. (You know we are country folks, and it takes us a long time to get around to anything.) We took some drawing rolls out and put in these new ones and could not find that we had helped ourselves at all those two years. Finally one fellow found there was too much draft between his supply rollers and drafting rollers; it was just pulling on it, and that is where the unevenness came in. We went to work and changed that by two teeth and immediately found the work was better. Did we do the right thing in doing that, or should we have left that in there?

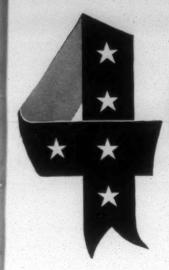
MR. LOWE: I am inclined to think you did the right thing. You may have had too much draft in there, breaking your sliver. Our shop may have made an error there—may have given you the wrong gear.



#### Spinning

CHAIRMAN GREEN: The next subject is spinning, and there is a subhead on spindle developments. I should like Mr. Gayle to tell us now something about the new developments in spindles.

WALTER GAYLE, Southern agent, Saco-Lowell Shops, Charlotte: This spindle I have is called the New Era spindle. I thought you might like to see it. One of these spindles is cut out so you can see the bearing, and I will have it passed around so you can examine it. Before I start talking about this New Era spindle I think I should say something



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about the development of the spindle. The first was the old mule spindle, with its two bearings, one at the top and the step bearing. Next came the Sawyer bearing, with a whorl also in the middle. Then the Rabbeth came in; it made exactly the same thing but put the top bearing up inside the whorl and used the step bearing. Then they put in the bolster and put in a base, so you could lubricate it every two or three weeks.



I want to tell you something about the headaches of spindle manufacturers. Sometimes you order spindles to duplicate those you have and send us a spindle to go by. Sometimes that spindle has been made to duplicate another. So if we duplicate it you get your mistakes and our mistakes and those of the other manufacturer. In 1935 there was a meeting of spindle manufacturers. Until then they had been putting out about 40 types of spindles, but at that meeting they decided on five types. After that there came along the

paper tube spindle and the wood spindle.

I have here some bobbins that I want you to see. With the exception of those two bobbins there they could have been made on the paper spindle or the New Era spindle that you are looking at. You will see from this New Era spindle that it is the old double-bearing type. The spindle does not revolve at all. It has just two bearings. Some of these spindles have been running a maximum of five years, some three and four years. We do not know the life between lubrications. The idea is that when we find out what that life is we come to your mill, take off your spindles from a frame, put on our new ones, clean your old spindles and put them on your next frame, and so on. When we get through we have a frameful of your spindles and you have a frameful of our new ones. We do not know yet what that life will be. The idea is that it will be 31/2 or four years.

Some of you, of course, have had to plumb spindles during the course of your life, and you know it is somewhat of a job. But with this spindle it is the simplest job you ever saw. Here is a piece of wood that represents the spindle rail. You drop your first piece of rubber bushing in. Put your next one on and tighten it with a wrench about eight or ten times. Drop in the tube. The tube has a concave section. Drop the tube in. The part of the spindle that does not revolve has a convex section that matches the concave section. Drop it in there. You see you can move it around any way you want to. Then I put this nut on and just tighten it thumb tight; that is all. I can still move this spindle around, but you notice the center is right here all the time; it does not move away from there.

QUESTION: Is that spindle usable just on warp?

MR. GAYLE: On warp, yes. Then the cap goes on. It is pretty easy to assemble, you see. All the vibration is absorbed in the rubber. Now, these bobbins were not done on that particular spindle but were done on a wooden tube spindle. This had a front roll speed of 192; it is 24s yarn. There is the one it replaced. This is from that same mill,

No. 12s yarn, with  $2\frac{1}{2}$  to three-inch ring. On the  $2\frac{1}{2}$ -inch ring it had 6.5 ounces of yarn; on the two-inch ring it had ten ounces of yarn. The spindle speed was 9,000 on both.

Mr. MULLEN: Are those wooden bobbins or paper bob-

MR. GAYLE: These are paper.

MR. MULLEN: Are they straight or tapered?

MR. GAYLE: Tapered.

MR. MULLEN: Do you mean this spindle here is tapered,

MR. GAYLE: Yes. That is a small spindle, too, by the way, if you are interested. I thought you were going to ask how long the paper spindle lasts. It lasts longer than the wooden bobbin.

MR. MULLEN: What is it made of?

MR. GAYLE: Paper. A lot of mills I go into show me their bobbins. The bobbin is shellacked on the outside and looks nice and shiny, and they think it is all right. But if you put the spindle in you find it is worn and rough.

MR. MULLEN: What do you do if you have a little yarn

left on the bobbin? You can't cut it off.

MR. GAYLE: Slip it off. It has a pretty good taper.

CHAIRMAN GREEN: What would happen with the Barber-Colman winder?

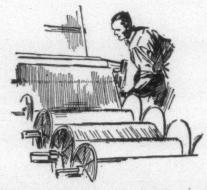
Mr. GAYLE: They are made for the Barber-Colman winder.

CHAIRMAN GREEN: It does not slip off?

MR. GAYLE: No. You put a little thimble on it.

Mr. B.: If you happen to step on one of those bobbins will it tuin it?

Mr. GAYLE: Yes, or if you roll a truck over it.



#### Slashing

CHAIRMAN GREEN: Let's go on to the next subject, slashing. Under that heading we have these questions: "What system of feeding size do you use—circulating or gravity? Give the advantages of your system." "Does the size solution thin down after running for some time? If so, how do you control this?"

J. B. HUTCHINSON, overseer of weaving, Patterson Mills Co., Roanoke Rapids: We use the circulating system, and we like it. I do not know anything about the gravity system. The important question, to my mind, seems to be whether it thins down. That is the question that is asked. We find that it does not thin down in our system. Others might find that it does. We simply took and used a pump that transferred from the cooking kettle to the storage kettle. It is cooking all the time, and we do not have any condensation that is noticeable or any breaking down.

CHAIRMAN GREEN: How do you know, Mr. Hutchinson, that that size does not thin down?

MR. HUTCHINSON: We had a man test it, and he says it does not. We take one 250-gallon storage kettle and test it to begin with and then test it when it has gone down, and there is no thinning. We have five slashers and one 250-gallon kettle.

CHAIRMAN GREEN: You are continually feeding into it. You are fortunate. If you are running five slashers from one kettle you are not running a circulating kettle, really.

MR. HUTCHINSON: We are not going very deeply into that because we are fortunate enough to have a complete new sizing system almost installed.

J. P. LEE, assistant overseer, Erwin Cotton Mills Co., Erwin: We have one kettle that lasts an hour—250 gallons.

CHAIRMAN GREEN: I should like to have a little mill, that does not use it too fast. You fellows put it in too fast and use it up too fast. I have been taught that any action you take on your size tends to thin it down—any beating or anything like that. If not, there is not much sense in stirring it up from the bottom.

MR. HARDEN: We have three mixing kettles, or two cooking kettles and two storage return kettles, because we are running two kinds of size. We stop off one of those kettles, and that helps some, but I think we still have probably too much kettle capacity. I was interested in what the gentleman here stated, that he is running one return kettle and two cooking kettles.



#### Loom Inspection

CHAIRMAN GREEN: Let's go on to weaving. The subject there is "System of Inspection," and the first question is: "What do you inspect on the loom and how often?" Has anyone anything to say about that? Don't any of you weave?

Mr. HUTCHINSON: Is that for quality control or for maintenance?

CHAIRMAN GREEN: I think the two go together. If you don't look after your shuttles you will have bad cloth. If you do not inspect your midget feelers you will have bad results. If you don't inspect your machines and keep them up you are going to have trouble.

We have a few minutes left, so let's talk about inspection for quality. What about harness timing and setting? How often do you check that and what variation do you allow? You must have some system. Tell us about your harness setting—what variation do you allow? Do you have twill weave or plain weave, Mr. Stephens?

MILTON J. STEPHENS, assistant overseer of weaving, Erwin Cotton Mills Co., Erwin: Plain.

THE CHAIRMAN: Where do you level your harness off with relation to the fell of the cloth? Or don't you set it that way?

Mr. STEPHENS: Two and one-half inches.

THE CHAIRMAN: Do you allow much variation from that point? (Continued on next page)

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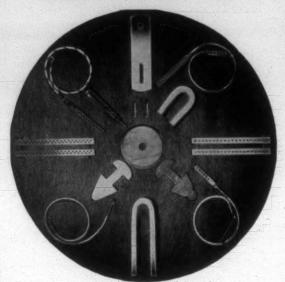
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Mr. STEPHENS: No, sir, I don't think there is much variation

CHAIRMAN GREEN: Do you have any idler gear or auxiliary gear at Erwin, or do you have came on your cam shaft?

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MR. HOWELL: Cams on the cam shaft.

THE CHAIRMAN: Well, you are lucky. We find you get a variation where you are moving your gear so much.

If there is nothing more about that, what about your pick motion? What variation do you allow from the standard?

MR. HUTCHINSON: I should like to find out if anyone present uses a standard for that or whether you just leave it up to the fixer's discretion. Does anyone use a standard on any part of the pick motion? Is there a standard for any of those settings?

GRADY J. KING, overseer of weaving, Rosemary Mfg. Co.: Over at Rosemary we have 1,100 looms, and they are the only ones we have a standard on. We have a standard for the stroke—a standard of 81/2-inch stroke. Of course we keep our lugs level all the time, or try to.

THE CHAIRMAN: Of course, the width of the loom has a good deal to do with it and also the type of fabric you are running. That is one reason we have not had much discussion on weaving, because many of our mills are yarn mills, and then the weave mills have several different types of construction. But we thought we were neglecting the weaving, so that is the reason we put it on the program. At Erwin, for instance, they have 40-inch looms, and here in Durham they have 90-inch. But it seemed to us they should have standards.

MR. LEE: As the loom runs it wears, necessarily. I should like to ask Mr. Howell if they have worked out standards over there.

MR. Howell. We have started using gauges on practically all of our settings. I do not recall the settings. We have recently started using these gauges, and it makes a tremendous difference. We use them for practically all the settings, where we can use them.

CHAIRMAN GREEN: How about thin places and broken picks? What methods have you adopted for eliminating those? Tell us what you do for that.

A MEMBER: The only thing that causes that is badly wound filling, I think.

THE CHAIRMAN: That goes back to the spinning, of course. Well, a lot of weavers want to know how to get away from thin places and broken picks. We know what causes them, perhaps, but do you have any method of checking them? Do you let it all go to the cloth room until you get 20 per cent of seconds and you have to get another job or catch hell from your overseer or superintendent, or what do you do about that?

MR. HUTCHINSON: We have certain points we check to control it. We check the fork, and the relation of the fork to the grid is the main point in checking. We carry it on down to the battery box, then the swords. Those are the main points in checking.

THE CHAIRMAN: How long since you checked your lay

MR. HUTCHINSON: We check that when we check the swords and when we check the relation of the fork to the grid

CHAIRMAN GREEN: How often do you check your feelers at Erwin? Every day or every week, or how often? You have feelers, don't you?

MR. LEE: We check every time the warp is out; the loom

is checked thoroughly. Then the loom fixer sets it. If a mistake comes out in the cloth a report sheet goes to the weaver and one to the fixer, and another sheet goes to the head loom fixer. The fixer then checks the loom, and the head fixer will also come and check it very carefully, and they usually find the trouble right away.

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THE CHAIRMAN: How does the system of inspection work when the loom cleaner is cleaning the loom and the oiler is oiling it? And when the fixer is checking the loom when the warp is out doesn't he have any flags on his other sections? What does he do about the flags?

MR. LEE: We find that if we check the loom carefully while the warp is out it saves a lot of flags. It has given us a good deal of satisfaction.

THE CHAIRMAN: Do you find that he can check the loom pretty thoroughly while the warp is out?

MR. LEE: Yes, sir, after a little practice.

QUESTION: Is that done by the fixer that runs the section or by another one?

MR. LEE: By the fixer that runs the section. I might say the head fixer assists him, and the overseer also. We check behind them often to see if the loom is all right or if anything is worn that should have been taken off while the warp was out. We just check on that to see if they do the work carefully.

#### Glass Fiber Use Is Expanding

A wartime development, superfine textile fibers of glass, are proving their commercial value now and researchers are seeking new commercial usefulness for the product in wearing apparel. Developed originally as a kapok substitute in naval life preservers the superfine mineral fibers in "wools" and yarns are today developing good markets in heat-sound insulations, with demands for the product exceeding production.

Glass fibers are microscopically thin glass rods which are flexible, strong and free from shrinkage or swelling because they cannot absorb moisture. In conventional sizes they range from 23 to 38 one-hundred-thousands (.00023 to .00038) inches in diameter.

Army field jackets, parkas, boots and mittens lined with fiberglas will be tested for their protection against extremely cold temperatures in the Alaska maneuvers next winter, the War Department announced recently. Experimental types of Arctic wearing apparel, designed by the Quartermaster Corps, employ a one-inch layer of fiberglas batting in place of the wool and pile linings used in standard cold weather clothing. The fiberglas batting is quilted in small squares on nylon mesh and inserted between the outer shell and inner lining of the garment. At present the lining is attached, although the possibility of a detached liner, for cleaning purposes, is considered.

An experimental fiberglas-lined parka was worn by a Quartermaster observer during the recent Musk Ox Operation in Northern Canada last winter. The observer reported that it afforded complete comfort even when the temperature was 40 degrees below zero—the coldest experienced in the exercise. Some recommendations for minor alterations, such as increasing the depth of the parka hood, are being incorporated in the new designs. With fiberglas insulation, the parka weighs one and one-half pounds less than the combined weight of the standard pile parka and parka field cotton O. D., and three pounds less than the

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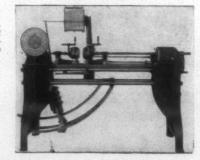


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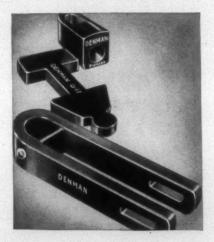
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overcoat field parka type. At the same time the fiberglas insulated garment is expected to prove much warmer, less hampering to body movements, and easier to put on and off. Experiments are being conducted with sleeping bags employing fiberglas as the insulating medium.

#### American Viscose Reports On Earnings

American Viscose Corp. reports net profit of \$2,050,229 for the quarter ending Sept. 30, 1946, equivalent, after preferred dividends, to 98 cents per share of common stock based on the average number of shares outstanding during the quarter. These earnings compare with \$834,565 or 31 cents per share reported for the same quarter of 1945. The net profit of \$8,149,612 for the nine months ending Sept. 30, 1946, is equivalent, after preferred dividends, to \$4.16 per share on the average number of shares of common stock outstanding during the period. These earnings compare with \$3,475,321 or \$1.50 per share during the corresponding period of 1945.

The earnings reported above include those for the last 18 days of September, 1946, from the business formerly owned by Sylvania Industrial Corp. The assets, business and good-will of the Sylvania Industrial Corp. were acquired on Sept. 12, 1946, in consideration for 327,411 shares of common stock of American Viscose Corp. The earnings for the quarter ending Sept. 30, 1946, were adversely affected by the discontinuance of operations at the Meadville plant as the result of a strike which began June 29, 1946. This strike was settled Oct. 1, 1946, and operations were resumed. It is expected that the normal rate of production will be reached about the middle of November, 1946.

The net sales for the first nine months of 1946 were \$98,064,995 as compared with \$87,618,030 for the corresponding period of 1945, an increase of 12 per cent. Dividends declared and paid during the nine months ending Sept. 30, 1946, were \$3.75 per share on the five per cent cumulative preferred stock and \$1.50 per share on the common stock.

Australia has initiated a five-year industrial program with the purpose of developing textile production as a major factor among the country's secondary industries. Albert C. Hard, newly appointed Australian Trade Commissioner, will direct the program. Domestic demand for textiles in Australia built up during the war years has caused a strict allocation system to be instituted to furnish clothing for the domestic market, but Mr. Hard is of the opinion that restrictions will be lifted by next year.

Exports to the United States of finished textiles will be underway by the fall of 1947, he said, but added that he does not believe the full potential of the Australian market as a producer of merchandise for the United States will be realized for five years. Declaring that the United States had replaced Great Britain as Australia's number one customer for raw wool this year for the first time, Mr. Hard said, "Australia is aiming at as large an export business with the United States as possible. We are looking to the United States to absorb the greater part of our exportable quality textiles, particularly of fine worsteds."

Among American firms that have already made commitments to establish plants in Australia are Burlington Mills Corp. and Julius Kayser & Co.

### M-328B Is Terminated By C. P. A.

As a companion step to the lifting of price controls, the Civilian Production Administration has announced the revocation of the low-cost clothing program order—M-328B. C. P. A. officials said the recent elimination of price controls made continuance of the low-cost clothing program no

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M-328B, which held manufacturers' production of low-cost clothing at approximately half of their total production of selected clothing items, was originally issued by the War Production Board on May 9, 1944. As then drawn and administered, the order dealt with specific garments of which there were shortages, and programs for various items were issued as the need arose. When a shortage developed in a necessary item it was listed on Schedule A under the order, and priorities were granted to a manufacturer who agreed to make it. There were no mill set-aside provisions for the first programs, although in some later programs directions were given to individual mills which did establish mill set-asides.

In announcing revocation of M-328B, C. P. A. said: The termination of all price controls on textiles has made Order M-328B and its schedules no longer practicable. There is no basis for continuing these restrictions either on the producers of the fabric or on the manufacturers of the clothing. All material obtained with priorities assistance under Order M-328B or its schedules may be used or disposed of in any manner or for any purpose, without regard to any of the former provisions of Order M-328B or its schedules but subject to all other applicable Civilian Production Administration orders and regulations. Producers and finished goods suppliers may deliver cotton, rayon and wool fabric without regard to the former provisions of Order M-328B or its schedules, and without regard to any former preference rating certificate or other instrument issued or used under that order or its schedules.'

C. P. A. also listed the accomplishments of the low-cost clothing program. By the second quarter of 1946 the industry's average production of low-cost clothing was approximately 50 per cent of its total production. C. P. A. estimated that if the disappearance from the market of low-cost clothing had continued at the rate it was moving before M-328B was established, production of such clothing would by now be practically non-existent. In discontinuing the program, C. P. A. pointed out that although it would be possible to continue the provisions for set-asides, to grant priorities, and to rule that material obtained through these priorities must be used in specific items, it was no longer possible to insure that the items so manufactured would be held to prices within the low-cost field.

The American Wool Council announced Oct. 25 that textile manufacturers are threatened with an acute shortage of fine wools in 1947, despite a reported world surplus of apparel wools. The council attributed this situation to increasing dependence of the American public on foreign sources of supply. Figures were released showing that while wool consumption had increased from 600,000,000 to 1,000,000,000 pounds annually in the past 25 years, American wool growers are producing less. Domestic growing declined from 475,000,000 pounds in 1942 to 287,000,000 pounds in 1946 and is continuing downward, the council said.





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#### Institute Stresses Research in Production

(Continued from Page 30) (15) to have an adequate pile anchorage under conditions of wear and cleaning; and (16) to be resistant to destruction by moth larvae. "It scarcely needs to be said," he stated, "that an ideal fabric for this use still remains to be developed; that garment design and patterns with the fitting of clothing is in many respects more important than the fabrics themselves. It is not enough simply to develop an excellent fabric. There is an over-all problem of food, clothing and shelter in which the design of a textile fabric is only one element of an exceedingly complex problem that is today only little understood in terms of the fundamental scientific principles involved."

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"The Army wool sock is one of the most important items of a soldier's equipment," General Gregory said, "and by concentrated effort and close co-ordination with the industry through pilot-plant operations and demonstrations, it was possible to convert the entire industry producing Army socks over to the use of a suitable process, so that during the last year of the war shrinkproof cushion-sole socks were available for the entire Army." He emphasized that there is still much work to be done in applying shrink resistance to such items as underwear, sweaters, flannel shorting and blankets. Also, that it was in the interest of wool growers and manufacturers to institute an active educational program to teachthe public what it may expect from washable woolens, with obvious benefits to both civilian and military economy.

In closing, General Gregory stressed the great contribution made by industry in the application of the findings of the quartermaster research to the development and production of textile products which resulted from close co-operation from industry with the Army. He said: "At no time was it possible for the quartermaster research to reach a solution of its problems without active assistance from industry. That probably will always be the case and, in one sense, it should be. Practically all quartermaster products have a civilian counterpart. By continual close collaboration it should be possible in the future for the Quartermaster Corps to continue the improvement of its items for military use, while at the same time contributing to the improvement of similar items for civilian consumers. While modes of warfare may change, and while it is devoutly to be hoped that there will never be a need to apply the results of military research in environmental protection to actual combat conditions, the American public and the textile industries can well justify continued research in this field by the Quartermaster Corps. Not only will it provide insurance against possible military contingencies," he said, "but it will have a great value to the industries themselves and to the consumer. Whether in the field of improved fabrics, or the development of flameproof clothing, shrink-resistant wool items, longer-wearing textiles or whatever is of interest to the Army in the field of textiles, the civilian economy can also benefit from the Army's research in these fields, and from the leadership of quartermaster research and development in seeking a solution to these problems as a military neces-

Lewis Sanders, president of the institute, in presenting his annual report of the group's activities, stated that "the research program of the institute, as approved by its research advisory committee, constitutes definitely integrated research having clear-cut objectives—the development of certain basic data essential as a foundation for continuing special research and which has long been needed, the development of the research on warp sizing and other sizing on which the institute has already done substantial and valuable research, and the development of some special lines of research having more immediate practical relations to current mill operations."

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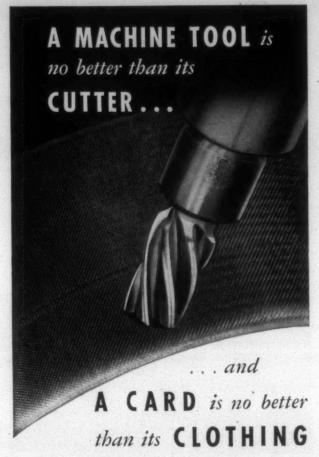
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In addition to its general research program, the institute is now prepared to encourage and undertake the setting up of special research projects on matters of interest to groups of member mills, to be financed by them, and the information to remain their property for an agreed upon period of time before being published. This phase of institute research is subordinate to and must always be kept in proper relation to the basic research program conducted for the benefit of all members by the institute.

Commenting on the fellowships, Mr. Sanders said "the institute maintains graduate students working on textile research under institute and Textile Foundation supervision while taking their academic work and degrees at Princeton University. These fellowships are providing a steady supply of highly trained men who will be available to the textile industry." Through taking advantage of the resources and faculty of Princeton University, the institute is able to fulfill its educational services to the textile industry and still devote all its resources to research and the dissemination of the results. The high reputattion of Princeton University attracts a very desirable type of graduate student.

H. Wickliffe Rose, honorary chairman of the meeting and chairman of the institute board of directors, reviewed the day's program in his closing remarks when he said: "The ideological warfare in which industry is now involved threatens the capitalistic system by destruction of the ability of corporations to make profits. Caught in a squeeze between rising wages and costs and price levels controlled by government, management is forced to consider more carefully than ever before the means for making a profit. Greater productivity partly rests in the will of the workers. It depends also, to a great extent, on research. Fruits of research are harvested as new products which, placed in productiton, create new jobs; new technology, which serves to produce better products more efficiently; and improved environment or working conditions. While making it possible for a corporation to do business at a profit, and thus to pay rent in the form of dividends for the machinery owned by the stockholders, research, through these three types of results, serves the employees and the public.

"Most progressive companies are conducting research themselves while fostering research done by others in their fields. The broader and more basic the subject or problem, the more expensive it is for a company to do the job itself. For that reason we find basic research being conducted in educational institutions and research institutes such as ours. A major activity of our institute is to give management new knowledge on which production can progress. The increase in support of institutional research by large and small mills means an increasing sense of responsibility for research, whether or not it is done within the company. There are many roads to the same destination. If the goal is the prosperity and happiness of the general public by the production of better textiles at lower prices in larger quantities when and where they are wanted, then the Textile Research Institute will continue to point the way through research."



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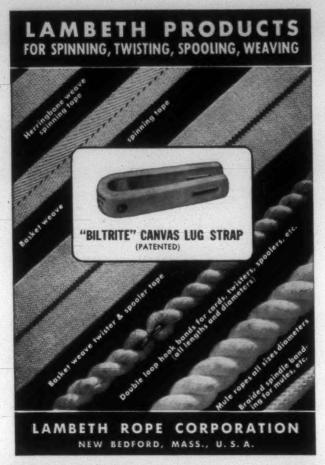
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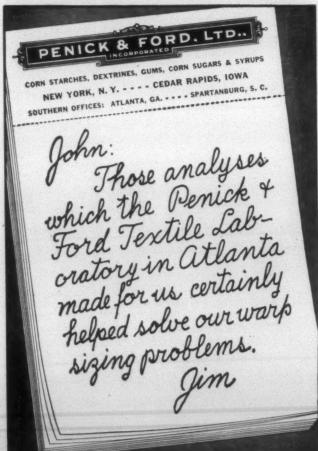
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### Spring Woolen and Rayon Cards Are Issued

Lively spice, copper, apricot and orange-tinted hues receive emphasis among the basic color ranges portrayed in the regular editions of the 1947 Spring Woolen and Rayon Cards, just issued by the Textile Color Card Association to its members. Advance confidential samples of the spring colors were previously sent to the organization's international membership. Margaret Hayden Rorke, managing director of the association, also called attention to the significance of refreshing new greens in the spring fashion forecast, as interpreted in juniper, jade, fern and bluish sea versions, as well as more animated mint and peacock greens.

Important likewise are warm burnished blond and amber tones, coffee cream beiges and suntan browns. The neutral gamut of grays is stressed in pearl, haze and light taupe shades. Cited as very promising in the rose gamme are cool glace strawberry and frosted raspberry tones. The sophisticated violine family finds smart expression in bluish renditions of lilac and violet, as well as rosier cyclamen and orchid tones.

#### New Record Set in Rayon Production

Third quarter rayon production, totaling 213,500,000 pounds, has exceeded production of the corresponding period of 1945 by ten per cent, and set a new record for the industry, according to the compilation made by the Textile Economics Bureau, Inc., in its November issue of *Rayon Organon*. Production for the first nine months of 1946, totaling 638,500,000 pounds, also was a new high figure, exceeding the output in similar periods in 1945 and 1944 by 8½ and 19½ per cent respectively.

October total rayon shipments amounted to 72,200,000 pounds, an increase of six per cent over September. Rayon filament yarn shipments in October were as follows: viscose-cupra 42,000,000 pounds and acetate 15,400,000 pounds. Domestic rayon staple shipments in October aggregated 14,800,000 pounds. Total rayon filament yarn stocks in producers' hands at the end of October amounted to 9,000,000 pounds, while rayon staple stocks were 2,600,000 pounds.

Rayon filament yarn (all processes) produced in the third quarter amounted to 167,300,000 pounds, a figure slightly above the second quarter, but 1.1 per cent below the record level established in the first quarter. However, viscosecupra yarn production in the third quarter hit a new high of 123,500,000 pounds, to exceed the previous record by one per cent and the third quarter of last year by 13 per cent.

Due to a three-months strike at one acetate yarn plant, finally settled in October, third quarter acetate yarn production totaling 45,800,000 pounds was at the lowest level since the third quarter of 1945 and eight per cent below the peak output in the second quarter of 1946.

The production of rayon staple in the July-September period reached a new record total of 46,200,000 pounds, which exceeded the previous record by two per cent and third quarter 1945 output by 12½ per cent. The new overall record is attributed to the increase in the output of viscose process staple, which amounted to 35,300,000 pounds or 3.5 per cent over second quarter output. On the other hand, acetate staple production in the third quarter was slightly below the second quarter peak level. Viscose staple production in the third quarter accounted for 76½ per cent

of the total output, the balance of  $23\frac{1}{2}$  per cent being acetate staple.

Domestic shipments of rayon filament yarn during the third quarter fell off slightly from the second quarter level. Deliveries amounting to 163,500,000 pounds were 1.1 per cent below those of the preceding quarter but 11.2 per cent over the third quarter of 1945.

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Shipments of both textile-type and tire-type yarns in the third quarter were one per cent under respective second quarter shipments. But for the first nine months of the year, shipments of textile type yarns were 8½ per cent above shipments in the same period last year, while yarn deliveries to tire manufacturers in the same period were 15½ per cent over those a year ago.

Compared with the April-June period, third quarter distribution of total yarn shipments to the principal consuming trades showed the following percentage changes: full-fashioned hosiery —10.3 per cent; circular knitting +2.7 per cent; narrow weaving +2.5 per cent; broad weaving —1.1 per cent; warp knitting —6 per cent; and tire manufacturers —1.1 per cent. There were no changes in shipments to seamless hosiery and miscellaneous uses.

Exports of rayon yarn by producers during the third quarter totaled 2,600,000 pounds, a decrease of 21 per cent under the previous quarter. Exports for the first nine months of 1946 were 47 per cent under the corresponding period last year. Of the total nine months' yarn exports, 23 per cent comprised tire-type yarns, against 35 per cent in the same period last year.

In the third quarter, production of viscose-cupra textile-type yarn showed an increase as well as viscose tire-type yarns. The total of 68,300,000 pounds of viscose-cupra textile-type yarn represented a 4.1 per cent increase over the preceding quarter. Viscose tire-type yarns at 55,200,000 pounds showed a 2.8 per cent increase. The output of textile-type yarns in the third quarter accounted for 55 per cent of the total viscose-cupra yarn production, the remaining 45 per cent being tire-type yarns.

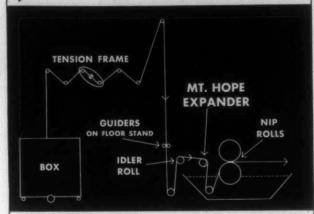
Average denier of viscose-cupra yarn spun during the third quarter was 219 denier and was unchanged from the preceding three month period. Average denier of acetate yarn production during the third quarter declined slightly below the second quarter, the averages being 95 and 97 respectively.

## One-Variety Cotton Encouraged in Alabama

Five thousand dollars in prizes is being offered this year to Alabama communities growing one-variety cotton that achieve the largest yields per acre of good quality cotton. The money, which will go into community improvements, is being offered jointly by the Alabama Cotton Manufacturers Association and the Alabama-Florida Cottonseed Products Association. The contest is being administered by the state agricultural extension service.

Communities are asked to grow a single variety of cotton, a variety best adapted to the area, and the strain is kept pure, with considerable benefit to the growers. The practice also enables cotton mills to know where to obtain any particular type of cotton they desire. In recent years Alabama has, by improved cotton practices, been able to produce the same amount of cotton on half the acreage as formerly, and most of the cotton is an inch or longer in staple, whereas a few years ago only a small percentage of it was that long.

# Mount Hope Free-Wheeling EXPANDER



#### AS USED WITH A STARCH MANGLE

The above diagram shows how a prominent finishing plant uses the Mount Hope Free-Wheeling Expander to keep cloth at maximum width and to prevent the selvage from curling before the cloth enters a starch mangle.

An advantage found in this plant is that, due to the lack of cloth friction on the Mt. Hope Expander the sleeve stays cool, whereas, on other types, the heat generated by friction will cause the sleeve to warp out of shape, particularly near the bearings, and to actually slough off.

The only repairing required to date on this expander has been replacement of the Neoprene sleeve and this has more than double the life of sleeves used on other expanders. Since the sleeve represents the major cost of upkeep with any expander of this type, the economy of the Mt. Hope Expander is evident.

Other advantages are as follows: -

Expanders can be set at any desired angle to the cloth.

Ball bearings, grease packed, are securely mounted in steel spools to outlast many Neoprene sleeve coverings and so designed that they cannot stick nor turn on the axle and cut it.

This expander is suitable for all fabrics, including rayon marquisette and rayon and cotton tire cord.

We will be glad to assist you, free of charge, with your cloth opening, guiding, or cross-stretch problem.



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#### Comers Work for Farmers' Salvation

(Continued from Page 36) and put on winter feed. He was astonished to find that when the cattle were fed on silage instead of their accustomed diet of Johnson grass and lespedeza hay, their milk production fell off alarmingly. The 51 cows that produced an average of 1,400 pounds of rich milk per day on grass, gave only 950 pounds when fed silage. Grass proved better as well as cheaper feed.

The Comers began to operate this program for improving the lot of Alabama farmers, and not out of any abstract desire to do good, but because they have a hard-headed realization of a basic economic law: that before a potential customer can become a customer in fact, he first must have an adequate supply of the long green. They learned this fact from their father, who occasionally took time off from the mills to handle such chores as being governor of Alabama.

Now they're busy preaching—and demonstrating—the idea that two money enterprises, cattle and cotton, are more than twice as good as one not-so-big-money enterprise. Before they finish, they will likely revolutionize the entire agricultural pattern of the state, and put plenty of the long green into the jeans of their farmer-customers in the process.

## Pace Says Research Is Cotton's Savior

A prediction that cotton would retain its important place in the agricultural economy of the South "if we get the research program that cotton really needs, and if we develop a cotton policy that is economically sound." was made last month by Representative Stephen Pace of Georgia, in an address before the state conference of county agricultural and home demonstration agents at Athens, Ga. "In foreign lands," he said, "the toughest competition is the competition of cheap labor. In our own country, the toughest competition is the productive genius of modern industry which is constantly improving its competitive power through research." To place production on a sound economic basis, Rep. Pace proposed: (1) Mechanization in planting, cultivating and harvesting. (2) Seed selection and treatment. (3) Building up the fertility of the soil. (4) Selecting the best type of cotton for each area. (5) Shifting from highcost to low-cost production areas. (6) Improved methods of disease and insect control. (7) A greatly expanded one variety program.

#### Insect Repellancy Standard Is Promulgated

A proposed commercial standard for woven and knitted fabrics and yarns treated to resist insect attack has been distributed, for review to the industries concerned by the U.S. Department of Commerce, National Bureau of Standards, so that, if necessary, it may be adjusted to meet the composite viewpoint of key organizations. The proposed standard was submitted by the American Association of Textile Chemists and Colorists in collaboration with the American Society for Testing Materials and the National Association of Insecticide and Disinfectant Manufacturers, Inc., and is the result of combined intensive investigations by committees of these three organizations over a period of several

Purpose of the commercial standard is to establish minimum requirements on a nationally recognized basis for those woven and knitted fabrics and yarns which have been treated in any way to resist attack from certain insect pests, namely, the case-bearing clothes moth (Tinea pellionella), webbing clothes moth (Tineola biselliella), tapestry moth (Trichophaga tapetzella), common carpet beetle (Anthrenus scrophulariae), furniture carpet beetle (Anthrenus vorax), varied carpet beetle (Anthrenus verbasci), and black carpet beetle (Attagenus Piceus), as a protection to the manufacturers, distributors, and ultimate consumers; to promote fair competition between manufacturers; and to serve as a basis for guaranteeing quality.

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The commercial standard covers the following five classes of resistance to insect attack, depending on the service expected from fabrics and yarns so treated: (1) treated fabrics and yarns, (2) treated fabric and yarns—aged, (3) treated fabric and yarns—aged and laundered, (4) treated fabrics and yarns—aged and cleaned, (5) treated fabrics and yarns—aged, laundered and cleaned. It includes for each class requirements to be met to permit a treated fabric or yarn to be labeled or otherwise described as complying with the requirements of this standard, methods of test, and the recommended wording by which manufacturers and distributors may guarantee compliance with the commercial standard.

#### Operational Profits Reported By Textron

Consolidated net profits of \$3,658,884 for the nine months ending Sept. 28, 1946, for Textron, Inc., and its subsidiaries, including Nashua Mfg. Co., but excluding Textron Southern, Inc., and affiliate, have been reported by Royal Little, president of Textron. Comparative figures for 1945 are not available. The earnings are equal, after preferred dividends, to \$3.43 per share on the outstanding common stock of Textron, Inc., Mr. Little said. He added that the total profits are after deducting \$624,926, representing earnings applicable to minority interests and earnings prior to the acquisition of stock interest in subsidiaries by Textron.

Bank loans of Textron Southern, Inc., have been reduced to \$2,000,000, Mr. Little said, and the cotton position of Textron, its subsidiaries and Textron Southern, Inc., was hedged prior to the recent decline in cotton prices.

#### Russian Cotton Waste In Market

Appearance of cotton waste in the United States from Russia, apparently being imported without quotas, was reported Oct. 1 by Dr. William P. Jacobs, president of the American Cotton Manufacturers Association. Dr. Jacobs, upon investigating "rumors" that the cotton waste was being imported, said that he found that not only were they true, but that these imports were increasing rapidly with imports for June being more than 100 per cent greater than for the entire first three months of this year.

"Although presumably this waste is being held for reshipment, it is a known fact that some was sold in this country at twice the ceiling price set by the Office of Price Administration for American waste. I regret extremely that such a situation has developed. While it is manifestly unfair to the American businessman it represents a serious threat to the farmers who grow short staple low-grade cotton," Dr. Jacobs said, adding "of course, the only real solution for this situation was the decontrolling of cotton waste, for cotton waste happens to be one of those type of products which did not lend itself to effective price control."



A simple knot can make or break the finest yarns—offset the best efforts of men and machines.

It is in the winding room that you may find the weak link in your production chain—the one operation that alone can set the quality standard of your finished product. It is here that the speed, accuracy and care with which the weaver's knot is tied is so vital to the processes that follow.

The Boyce Weaver's Knotter ties a perfect weaver's knot and clips the ends in one fast, smooth action. It gives you dependable quality control where it really counts.

## MILL DEVICES COMPANY

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#### Representatives





### Spinners To Aid Fight On Inflation

Members of the Carded Yarn Association, meeting at Charlotte Nov. 15, adopted a declaration of policy committing the industry, which operates some two million spindles, to "resist firmly all forces which tend to increase the cost of living and induce inflation." More than 200 mills in the Southeastern, Middle Atlantic and New England states were represented at the convention, during which current officers of the association were re-elected. They are: E. Owen Fitzsimons of Charlotte, president and secretary; E. N. Brower of Rockfish Mills at Hope Mills, N. C., chairman of the board; Harvey W. Moore of Brown Mfg. Co. at Concord, N. C., vice-president; and W. N. Banks of Grantville (Ga.) Mills, chairman of the colored yarn division. Miss Juanita Nixon of Charlotte was appointed secretary.

The morning business session was devoted to a discussion of matters particularly pertintent to the carded yarn spinners, and subsequent adoption of various resolutions. The text of the resolution pertaining to price decontrol follows: "The industry did not seek decontrol in order to obtain higher prices or greater profits. It desired a return of free enterprise in order to bring about better distribution and production and a better balanced production. The way now is open to meet more adequately the great demand for cotton goods and to provide improved qualities and quantities to consumers at reasonable prices. The industry recognizes fully the dangers of continually rising prices and will firmly resist all forces which tend to increase the cost of living and induce inflation."

In his report to the membership Mr. Fitzsimons emphasized that the elimination of Office of Price Administration controls would bring countless troubles on the industry if it should follow unwise policies. "With O. P. A. out, it is obvious that the mills will have to make their own sales policies. Yarn prices should be based on the formula endorsed by O. P. A., which includes current replacement cost of cotton, weighted average mill conversion cost and a reasonable profit." He urged that carded yarn plants adopt modern cost accounting systems so as to be in position at all times to determine with accuracy the cost of producing any required count or description of yarn, providing always that each mill stays within the limit of its own manufacturing facilities. The group's president warned also that "sellers and buyers again will be faced with the matter of abiding by the contract rules unanimously approved some years ago by all divisions of the yarn trade. If followed, these rules will go far toward keeping trading on an orderly basis in even the most difficult times. With basic economic factors moving toward relative stability, the transition from O. P. A. control to operations under the laws of supply and demand should be a painless and welcome change.

Dr. Claudius T. Murchison of New York, president of the Cotton-Textile Institute, spoke during the luncheon session on general business cycles and how industry can be prepared for them. He stated that it is impossible for American industry to talk itself into a depression, because "depressions always come when no one is looking for them." Continual review and analysis of business policies, then taking all possible precautions, is the advice offered by the speaker. Depressions, he stated, can result from five forces beyond the control of business: (1) government fiscal policies; (2) volume of production in agriculture; (3) policies and powers of labor; (4) overconcentration of capital goods

investment; and (5) growth of new industries, then stoppage of accumulative process by satisfying demand so that only replacements are necessary. Dr. Murchison urged his listeners to see that their business situations are sound in relation to all these factors. "Don't be pessimistic, don't be optimistic, but simply be realistic," he concluded.

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At the close of the morning executive session, the following directors were elected: for one year—R. C. Forrest of Uniontown, Ala., J. G. H. Morriss of Anniston, Ala., L. E. Bowen of Tifton, Ga., H. L. Battle of Rocky Mount, N. C., W. L. London of Pittsboro, N. C., Leonard Moretz of Maiden, N. C., and P. M. Neisler of Mayo, S. C.; for two years—J. A. Connor of Covington, Tenn., I. C. Milner of Atlanta, Ga., P. L. Shafer of Carrollton, Ga., Karl Bishopric of Spray, N. C., J. Boyce Choate of Charlotte, J. A. Cooper of Henderson, N. C., and J. C. Cloninger of York, S. C.; for three years—J. Craig Smith of Sylacauga, Ala., W. N. Banks of Grantville, Ga., G. B. Barnwell of Macon, Ga., Philip Dana of Westbrook, Me., R. L. Harris of Roxboro, N. C., H. K. Winget of Albemarle, N. C., and J. A. Farmer of Anderson, S. C.

## Big Investment In Air Conditioning

Southern textile mills, pushing forward a modernization, and expansion program involving approximately \$200,000,000, next year will make the heaviest investments in air conditioning equipment ever made by the industry in a single year, according to John E. Haines, vice-president of the Minneapolis-Honeywell Regulator Co. Improvement of air conditioning and controls stands near the top of modernization items planned by the industry for the sake of plant efficiency and human comfort, Haines said.

"Leaders in the industry realize that competition in all phases will be so keen during the next few years that they must take advantage of the most modern methods to keep pace," he said. "The day of guesswork operations is over. Automatic controls make it possible to hold humidity and temperature at the precise levels required for high-quality production. Thus, with the question mark removed from this factor, operators can turn their attention to other variables that affect efficiency. One by one, they can eliminate them until maximum production and quality are attained."

## Australian Wool Clip Is Below Average

An analysis of the different types and grades of wool produced in an average year in Australia, the first ever compiled, has been made by the Australian Wool Realization Commission. The most pertinent fact revealed in the report was that of the total average annual Australian wool clip of approximately 1,000,000,000 grease pounds, not more than between 500,000,000 and 600,000,000 pounds represents grades of 60-64s to 70s and finer, the types of wool particularly suitable for American wool textile manufacturers' requirements. Remainder of the average clip consists of varying quantities of combing and carding wools, grading from 50s and below up to 58s and 60s. Since world requirements must be met largely from the current clip, the council states it is this fact which is responsible for the continuing advances in prices being shown at present auctions. Due to the recent lengthy and destructive drought, the Australian clip this year does not exceed 900,000,000 pounds and the quantity of fine wools is said to be less than that of previous years.

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Read the Classified Ads on Pages 64 and 65

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FROM A SOUTHERN MILL"



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CHATTANOOGA, TENNESSEE

#### Competitive Position Of Cotton Is Analyzed

Only through its own negligence can the cotton industry suffer all the ills which today's pessimists foresee for it, Ed Lipscomb, sales promotion director of the National Cotton Council, said Nov. 15 before the Georgia Farm Bureau Federation meeting at Macon. "If the nation's best fiber, backed by the nation's largest agricultural industry, should fail to win today's battle for markets, the fault will be our own," Mr. Lipscomb said. "If cotton is defeated, you and I will defeat it. We will defeat it with negligence; we will defeat it by not doing the obvious things which are needed to be done for it."

Developments during recent weeks have brought into sharp focus the question of cotton's future, the cotton council official pointed out, but, he said: "There is nothing unexpected about the fact that we are now faced with great problems and even greater threats. Perhaps the tremendous speed with which these problems and threats have developed, and the extremes they have reached, were not foreseen. Perhaps we did not anticipate that cotton's price would drop so precipitously, that competitors would establish themselves in cotton's largest pre-war market so rapidly, or that the Senate and House agricultural committees would undergo changes in political majorities so soon. Yet there is none of us who did not know that once we came in sight of the end of abnormal consumption demands of the war period, we could expect some measure of all the things which have been happening to our industry.

"We knew that cotton's price would come down to some extent," he said. "We knew that competitors would be after our markets more vigorously than ever before, and that a change in the political complexion of the nation at large was at least a distinct possibility. No doubt the dizzy speed of the past few weeks has lowered the spirits of some of us to a point where the enervating effects of pessimism have made it difficult for us to maintain our perspective, and to appraise objectively the true position of our industry," Mr. Lipscomb continued. "Certainly, however, there is no better time than now for taking stock of ourselves, for finding out where we stand, and for moving ahead with all our might along those lines which assure us of greatest results."

It would be foolish, he declared, not to recognize the synthetic fiber production which today is the equivalent of two million bales of cotton annually, and will expand by more than 50 per cent by 1955. He admitted also that paper has made painful inroads into cotton's markets, as have jute and burlap from India, and low-cost cotton from foreign countries. "If we look only at our competitors' strength as compared with our own weaknesses, then indeed we have caused to despair," Mr. Lipscomb said, "but if we measure the virtues of our fiber and the strength of our industry against the virtues and strength of our competition, we will soon abandon our pessimism.'

Cotton's problem to keep its place in the nation's economy is the same problem facing a manufacturer of razor blades, chewing gum or refrigerators, he told the federation. "We must meet our competitors in the quality of our products, Mr. Lipscomb said. "We must meet them in price. We must match them in the volume of sales pressure we put behind our goods." Quality improvement of cotton must be in agricultural and industrial research, he said. The problem of competitive price must be solved through lower cost of cotton production, through more efficient farming

and better processing methods. Sales pressure must push cotton through tremendous expansion of advertising and sales promotion, he declared. In direct proportion to the effort the cotton industry puts behind this three-phase effort there is cause for optimism for the future of cotton and all those who depend on it, Mr. Lipscomb concluded.

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#### Universal Winding Reports On Earnings

Universal Winding Co. of Providence, R. I., in its 53rd year of manufacturing textile winding machinery, reports a net profit before taxes of \$516,489, after taxes of \$314,465, equal to \$1.09 per share on 288,340 shares outstanding at the close of the fiscal year, at the annual stockholders' meeting in September. While reconversion was completed at the start of the fiscal year, July 1, 1945, the building up of inventories in process was a major concern during the first six months. By the first of this year, operations were on a profitable basis, and production from January to June, 1946, was the greatest for any six months' period in company history. Accordingly, over 80 per cent of the net profit was earned in the last six of the fiscal year's 13 periods.

Recent 1946 dividends per share of common stock were as follows: On June 27, \$.10 was declared, payable Aug. 1 to stockholders of record as of July 10. On Sept. 9, \$.20 was declared, payable Nov. 1, to stockholders of Oct. 1.

In the past, export customers took an average of 45 per cent of Universal's production; this foreign business is being steadily resumed. Besides delivering machinery and parts to some 2,500 plants in the United States and Canada, Universal products were shipped to an approximate total of 30 countries in the export field during the year. In announcing plans for general plant improvement and increased production, the company emphasizes a backlog of orders amounting to approximately \$10,500,000.

#### **Textron Training New Sales Personnel**

With a student body of 22 young men drawn from throughout the United States, Textron, Inc., recently inaugurated a sales training school that provides a thorough course in textile selling and is expected to keep Textron supplied with the high caliber salesmen that will be needed in the future, James A. King, Textron's vice-president in charge of sales, announced recently. The school is being conducted by John C. Wallis, assistant to Mr. King, and before the course is finished practically every key executive of the company will have addressed the class.

The course lasts for approximately six months and began in October with the trainees gathered in New York. Until Dec. 20 the students will be instructed by key executives of Textron as well as experienced and qualified people from stores and other fields in the basis of selling, department and specialty store operation, textile manufacture and Textron products and policies. After a Christmas holiday, the students will return to their regions for another three months of practical experience during which time they will travel with experienced salesmen.

The campus in New York is the Hudson Room of the Woodstock Hotel. Morning and afternoon classes are held five days a week and on Saturdays field trips are taken to leading stores, manufacturing houses, the Stock Exchange, and other points. The last week of the course in New York is to be devoted to a field trip to Textron's laboratories, mills and sewing plants in New England.

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### Continued Spindle Liquidation Is Forecast

Data showing monetary losses in the cotton manufacturing industry in the two decades preceding World War II emphasize why the industry in the future must focus its attention upon adequate margins rather than upon volume at any price, Dr. William P. Jacobs, president of the American Cotton Manufacturers Association, stated recently. Dr. Jacobs revealed that during the 14-year period from 1926 to 1939, the industry as a whole suffered a net loss of \$64,-000,000. "The mills," he stated, "sustained deficits in six of the 14 years, and for the entire 14-year period the deficits

exceeded the profits by \$64,000,000."

Quoting Bureau of Internal Revenue figures, Dr. Jacobs listed years in which there was a net loss as 1926, 1930, 1931, 1932, 1935 and 1938. The 1930 deficit, amounting to \$92,600,000, was the greatest loss during the period. One result of these unfavorable deficits, he added, was the inability to build up the industry by plowing back earnings. On the contrary, after payment of taxes and dividends, the industry's resources were considerably reduced, which was reflected in the fact that during the same period units of the industry were "killed off" to such an extent that one-third of the spindles in place in 1926 had disappeared by 1939. In the face of this long-range loss record, and in view of the inadequate accumulation of reserves, cotton manufacturers cannot, he said, afford to depend too much upon the future. A return to the perennial buyer's market with the handicap of the new high costs, a circumstance which seems inevitable, is more than likely to cause a continuation of the liquidation of cotton textile spindles below the record low of today.

### Ray Bell Optimistic Over Textile Market

Primary cotton textile markets have been consistently following normal channels of behavior during and preceding the recent weeks of broad unsettlement in raw cotton, and full production has been sold even as has been the case for many years, W. Ray Bell, president of the Association of Cotton Textile Merchants of New York, declared recently in answer to inquiries from the press. "The prime task of the cotton textile mills today is unaltered from that which has long been the goal for this industry," he stated. "It is to get production up to a level which will meet the vast accumulated demands for current requirements and those carried over from the war period, stemming from our greater population at home and our expanded responsibilities to foreign lands. Progress has been made toward that goal."

Mr. Bell pointed out that numerous misunderstandings of the supply and demand situation in cotton textile markets had cropped up as a consequence of the spectacular cotton declines, from statements which "often bear the tinge of speculative cotton interest rather than squaring with the actual facts of the textile market. "Talk of the boom in textiles' being over, of customers not wanting goods, of outpourings of various items, all of them carrying the suggestion that supply has caught up with and outrun demand, has been widespread. However much this may be desired, it is not yet fact nor in the predictable future does it appear as a factual situation for staple cottons, nor for many semistaples and fancies.

"First," Mr. Bell stated, "there has been a great deal of loose talk about 'hoarded' stocks. This is not true. There are none. Some accumulations of stock at mills naturally occurred in the summer while the industry waited the long delayed O. P. A. price adjustment to cover the textile wage increase. Such accumulations never reached a normal prewar mill stock, and immediately after O. P. A. acted on Sept. 18 a rapid reduction of such holdings occurred. These goods went into distribution long before the cotton break and it is doubtful that a minimum stock of one week's production remains in mill ownership. Second, there has been talk of abnormal forward selling. This also is unfounded. Mills have continued to sell for 30, 60 or 90 days ahead. There are of course certain classes of textiles which are always sold as much as six months ahead, because it is months from spinning the yarn to finishing the fabric on such items. They are a normal long term sale and their sale is not influenced by cotton but by the necessities of productive schedules. Third, as to supply and demand, there is ample evidence of progress toward a better situation than was the case a year ago, and except for restrictive controls of the government we would be further down that road today than we actually are.

"A year ago, this industry fell to less than 400,000 workers employed from a wartime peak of 510,000. Gradually it has recruited more help. We had 452,300 according to the last census figures. We still are are short of the peak. In terms of yards, it now looks as if production in 1946 will total about 10,137,000,000 square yards. This is just about one billion square yards above the pre-war 1939 production. This billion extra yards is more than offset, first by the fact that 670 million yards are the minimum of necessity to cover the increase of population since 1939 in this country, and second by the fact that we are exporting this year 400 mil-

lion yards more than we did in 1939.

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Beyond this, we have a condition diametically opposite to pre-war in that there were then normal stocks at the mills, normal stocks in distributive channels, full supplies at retail, and consumer wardrobes of sufficiency. Today none of these are evident. We have struggled to create them, but we have not yet reached the point where additions to supply cover more than the attrition rate at which consumers wear out the goods they receive. Not until consumers have enough shirts and sheets and dresses so that they are comfortably garbed and their homes refurnished, and not until distributors and retailers have a working stock adequate to their selling needs will supply be in line with demand. Should this occur the market would only then have reached a position of balance and of normal good business. No danger point would have been reached until such a position of balance were substantially exceeded. And we have yet to reckon with the fact that, should we be fortunate enough to achieve such balance, broad markets exist in countries overseas which war has bled dry of textiles and whence the current demand has been appraised at double the 750 to 800 million yards of probable exports in 1946.'

Four and one-half million dollars a year are spent on employee benefits by American Viscose Corp., according to an article in the November issue of *Crown Rayon News*, the company's monthly magazine. The article, written by Fred A. Krafft, director of industrial relations, points out that this amounts to over \$200 per year per employee. It is equal to ten per cent of the total annual Viscose payroll. The reason for this strong benefits program, Mr. Krafft states, is to assure employees freedom from many ordinary worries arising from sickness, accidents, and other common emergencies.



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SOLVAY Liquid Chlorine does two important jobs in bleaching operations at the same time:

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## **Cotton Goods Market**

The first week that the cotton goods industry had experienced without Office of Price Administration restrictions found the majority of selling houses in New York City extremely cautious. There was hardly any immediate rush to sell just because a return to fairly free merchandising had occurred. On the contrary, houses were mostly withdrawn. Both buyers and sellers watched one another anxiously and everyone hoped prices would not start to rise. One large converter reported an intention not to buy anything for the next several weeks. By the end of this year, the whole price situation will have taken shape, he explained.

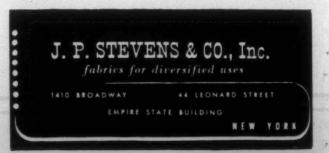
Generally the industry regarded the removal of ceilings quite soberly. Though several buyers invaded the Worth Street cotton houses on the first day of the week, armed with fancy offers of premiums for the better type print cloths for nearby and spot, the majority of mills and their

sales representatives stood their ground.

Little real open selling is anticipated in Worth Street for the present. Selling house centers take the position that mills are pretty well booked up on production, running in the majority of cases through the first quarter of next year. With forward orders on the books, they say, there is no need for rushing for the time being. Let the price picture take shape, let the market trend develop. Increases are looked for on certain types of print cloths and sheetings and jeans, it is explained. The labor situation might possibly erupt, it is pointed out, that being another cause for going easy. One executive advances the belief that the rest of this year will see little more than routine allocations being made by many of the leading houses. Though some mills will want to sell ahead through the second quarter, several of the leading outfits will hold tight, he says.

The industry regards the removal of price lids soberly, another leading source points out, and any "fringe" elements that might tend to let their better business sense be ruled by the temptation to let prices soar, will quickly be brought back into line. Certainly, he says, with resistance already showing itself here and there, very few buyers would be foolish enough to buy goods at fantastic prices. On the other hand, the majority in the gray cloth market take the view that there is little likelihood of a drop in

When the price of cotton dropped, selling houses were not inclined to sit about waiting for government to tell them what to do, market observers remind. Forward contracts were booked. Thus, even though these orders carried clauses permitting sudden changes if government restrictions had been continued, the confusion, trade centers assert, would have been great.



## Cotton Yarns Market

The Philadelphia cotton yarn market came through its initial week of free market operation in noteworthy fashion. There was no rush to release new higher prices, but instead, the industry waited to plant its feet solidly. Mills generally were booked up a month or more in advance and saw no immediate need for rushing out new price lists.

Here and there, suppliers reported they had lent a helping hand in emergency cases, where buyers needed minor

The consensus of many yarn men was that some upswing in certain counts hardest to obtain seemed in the wind, with unofficial estimates of the increase ranging from 18 to 25

A survey of top men in the market indicated a keen recognition of the fact that the industry had been handed a responsibility and would be watched in its handling of traditional functions under the free enterprise system. Numerous sources here expressed the feeling that the yarn trade, as a whole, would hold prices to a "nominal level" and not attempt to gun for all the traffic would bear.

It is urged that a sellers' market still exists in most sections of the market, and in kinds and counts still in very tight supply, a "moderate" increase in prices may come about. "It would be foolhardy, however, to attempt to gun prices skyhigh, particularly when aware of recent selective buying trends noted by end-users," one trade spokesman

The Agriculture Department reported Nov. 8 that this year's cotton crop is indicated at 8,487,000 bales of 500 pounds gross weight. Production was forecast at 8,724,000 bales a month previously. The crop totaled 9,015,000 bales last year and 12,553,000 for the ten-year (1935-44) average. Ginning is ahead of last year, but about 21/2 million bales behind 1944.

The Census Bureau has reported that cotton lint consumed during October totaled 931,229 bales, compared with 818,-449 bales during September of this year and 759,765 during October of 1945. Consumption of lint for the three-month period ended Oct. 31 totaled 2,605,189 bales as compared to a figure of 2,198,656 during the corresponding period of last year.

Cotton spindles active during October numbered 21,753,-942, compared with 21,642,924 during September this year and 21,443,371 during October last year.



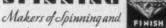
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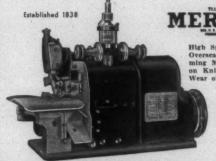
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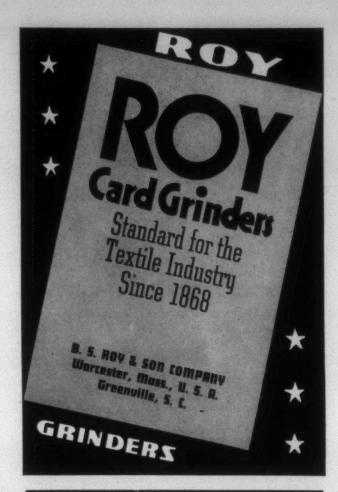
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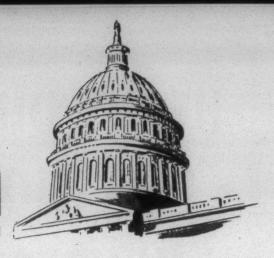
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SIZE OF THE NO-UNION VOTE IN SOUTHERN INDUSTRIAL ELECTIONS is disconcerting to N.L.R.B. which holds that run-off elections must always be between two unions unless the no-unionists poll the highest vote, or a union gets less than 20 per cent of the total. No-union vote is remarkable in view of vigorous pre-election drives and that union opponents cannot put on comparable anti-union campaigns.

Inference drawn from Southern elections is that there's a large body of worker opinion in the South that wants nothing to do with

unions -- probably attributable to the unions themselves.

C.I.O. will emphasize a guaranteed annual wage to bolster its lagging Southern drive, and coupled with the slogan of "better wages, hours and working conditions." Hard sledding in the South, with drain on union purses, is dampening the ardor of Northern unions for more strikes. They fear Southern competition and the flight south of Northern industry.

Most drastic cut in Government spending since the days of economy-minded John McDuffie and Lewis Douglas in 1931 looms if the veteran John Taber, of New York, takes over as chairman of the House Appropriations Committee. Taber's ax-wielding cut \$6 billion from 1946 appropriations, and if chairman he's expected to set a new record.

Meddling in domestic affairs and industrial relations in this country by Moscow officials is under inquiry by the House Un-American Activities Committee. The inquiry is leveled not only at suspected domination of some labor unions, but of Soviet inspiration of some recent speeches sharply criticizing this country's foreign policy. No punches are being pulled in this inquiry.

Communist activities are starting to come in for full-scale scrutiny by the Government through F.B.I. Known Russian agents are leaving the country. There's growing pressure in Congress for action, and its Committee on Un-American Activities is launching the widest

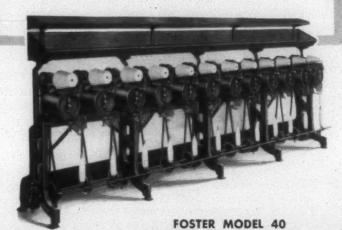
Communist investigation since 1919.

Some of the inspiration for the new Communist drive comes from top labor leaders, who are moving to clean their own houses. Congress may tighten the laws in the next session, with some strong labor support in doing it.

The emergency housing program is completely bogged down, due to materials and labor shortage. The program is 30 per cent behind schedule, with the lag growing. Trouble stems from unworkable and politically-inspired provisions inserted in housing laws in the last Congress.

The Army will ask for continuation of military drafting beyond March 31 if its volunteering drive fails. It will run into a stone wall of opposition in Congress. Feeling is that the Army should make its service sufficiently attractive to compete with industry in getting the men it needs.

## **HEAVY DUTY PRECISION** WINDERS



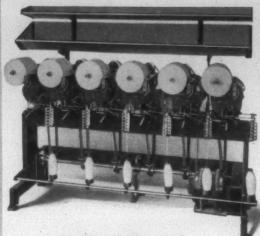
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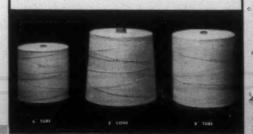
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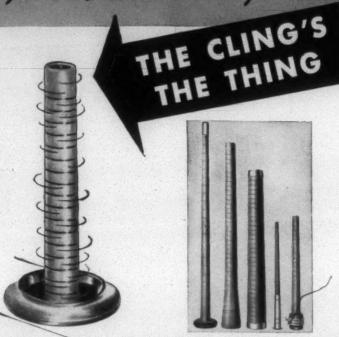
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- 5. Arbors for various types of cones and tubes furnished for both machines.
- 6. Traverses on Model 77 up to 8"-on Model 40 up to 61/2".
- 7. Multiple end winding of braider tubes on Model 40.
- 8. Model 77 winds a range of counts from 8/3 to 8/100; Model 40 from 30/2 to 8/40.



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A.P.T. Yarn Carriers fit the spindle exactly in the beginning, because they are built around a former which is of the same size and taper as the spindle on which they will ultimately be placed.

Other requirements for the perfect yarn carrier are listed herewith. A.P.T. Yarn Carriers meet them all. Give them a chance to improve the quality of your production and to reduce costs. They are adaptable to the spinning, twisting or weaving of all types of fibres.

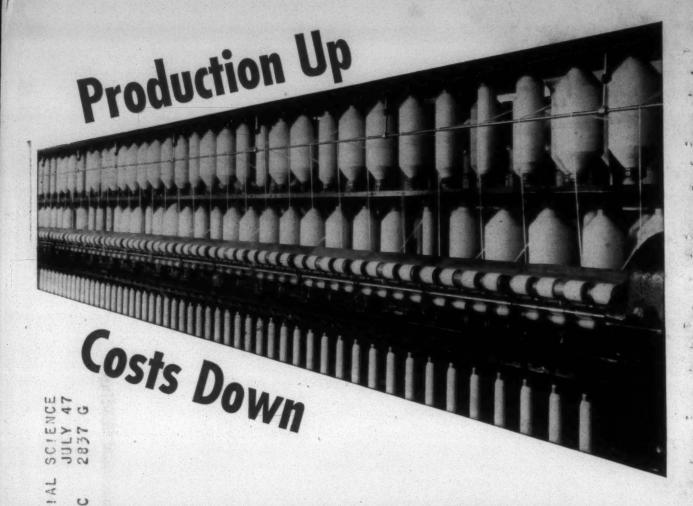
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